Operating manual Englisch

UFS 900sw

HDTV Satellite receiver

KATHREIN
Antennen · Electronic

Preface

Dear customer,

this operating manual is intended to help you make the fullest use of the extensive range of functions offered by your new satellite receiver.

We have tried to make the operating instructions as easy as possible to understand, and to keep them as concise as possible. To help you understand particular specialist terms that cannot be translated, we have added a short glossary at the end of the manual.

The power switch is an environmentally friendly feature. If you will not be using your receiver for an extended period, you should use the power switch to disconnect it from the power supply and save energy. For shorter breaks, you can use the remote control to switch the receiver to standby, which uses only a minimal amount of energy.

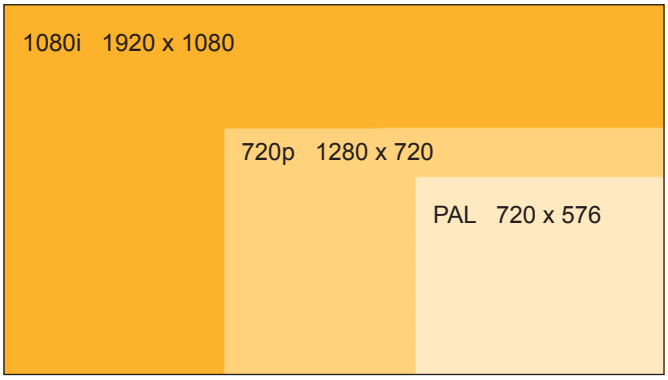
We wish you good reception and hope you will enjoy using your new HDTV receiver.

Your
KATHREIN team

Difference between PAL and HDTV

The difference between PAL and HDTV

High-resolution TV is characterised by a significantly higher number of picture lines on the TV set. The usual European standard PAL achieves a resolution of 576 lines vertically and 720 lines horizontally. High-resolution TV provides an impressive resolution, up to five times higher than the usual PAL standard TV, and hence delivering more detail sharpness and responsiveness.
A HDTV picture can contain up to five times as many picture points, that is, approximately 2 million pixels compared to a conventional PAL picture with only approximately 400,000 pixels.
Worldwide there are currently two HDTV standards, based on the two formats 1080i and 720p. The two standards differ in the number of picture lines and in the transmission procedure. For the human eye, the difference between the two HDTV standards is hardly perceptible, however; in comparison to the PAL system, moving pictures look much more dynamic. Transmission technology and reception equipment will be able to handle both standards in the future.



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Safety Instructions - Important Notes

These two pages contain important information about operation, installation location and connection of the unit. Read these instructions carefully before setting up the unit.

Danger!

Mains cable

Make sure that the mains cable (power supply cable) is not damaged. Units with a damaged mains cable must be disconnected from the mains (unplugged at the mains power socket) and repaired by an electrical specialist before being used. Only use the power pack supplied (if available)!

Risk of fatal injury due to electric shock!

Cleaning

Disconnect the mains plug before cleaning the unit. Only use a dry cloth for cleaning and only clean the outer surface. Never open the casing of the unit.

Touching the parts inside the unit carries a risk of death due to electric shock!

Playing children

Make sure that children do not push any objects into the ventilation slots.

Risk of fatal injury due to electric shock!

Warning!

Earthing

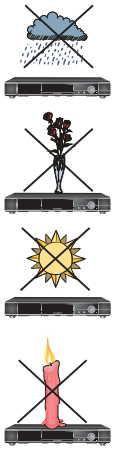
The antenna system must be earthed as specified or equipotentially bonded.
EN 60728/11 and any national regulations must be complied with.

Risk of voltage surges due to lightning strikes!

Power supply voltage

Only operate the unit at the specified mains voltage (indicated on the rear of the unit or on the external power pack). The unit may only be connected to the mains and turned on once it has been connected to the antenna and to the TV set or the cable network and PC.

If the mains voltage is too high, there is a risk of fire!



Moisture, direct sunlight, heat, naked flames

Protect the unit against moisture, dripping and splashed water (do not place any filled objects such as vases on top of the unit). Do not place the unit close to a heater or expose it to direct sunlight and do not operate it in damp locations. Only use the unit in a moderate climate, not in tropical conditions! Place no naked flames such as candles on top of the unit!

There is a risk of fire!

Batteries

If your unit was supplied with batteries (e.g. for the remote control), take care that the batteries are not exposed to excessively high temperatures, direct sunshine or fire. Exchange the batteries only with types that are identical or equivalent. Otherwise the batteries and also the remote control may be damaged. Comply also with the safety instructions stated on the batteries:

There is a risk of explosions!

Warning!

Ventilation

The heat generated in this unit is adequately dissipated. However, the unit should never be installed in a cupboard or on shelves with inadequate ventilation. Never cover the cooling slots on the unit (e.g. with other equipment, magazines, tablecloths, clothing or curtains)!
Do not place any objects on top of the unit. Unless stated to the contrary in the “Connection and Set-Up” and “Installation” sections in the manual included, maintain a clearance of at least 10 cm above the unit, 2 cm to either side and 5 cm behind the unit, to allow unobstructed dissipation of the heat generated.

There is a risk of fire!

Do not cover

→

Important

Repairs

Ensure that any repairs to your unit are carried out by qualified personnel. Opening the unit and attempting to repair it yourself will void all warranty claims!
Improper work on the unit may jeopardise the electrical safety of the unit.

The manufacturer accepts no liability for accidents caused by the user opening the casing of the unit!

Connections

Incorrect wiring of the connections can lead to malfunctions or defects on the unit!

Periods of extended absence, thunderstorms, mains socket accessibility

In order to disconnect the unit from the mains completely, the mains plug must be unplugged from the wall socket! Therefore install the unit close to a mains socket and make sure that socket is accessible at all times, so that you can disconnect the unit from the mains if necessary.
If you are away for an extended period, and during thunderstorms, always switch the unit off at the mains and unplug it from the socket. This also applies to the other equipment connected to the unit. Isolation from the cable network is also recommended. Note any timer programming (receiver) and turn the unit on again promptly before the recording time.

Installation location

All electronic equipment generates heat, However, the heating of this unit lies within the permissible range. Sensitive furniture surfaces and veneers may become discoloured by the effects of constant heat over time. The feet of the unit can also cause colour changes to treated furniture surfaces. If necessary, place the unit on a suitable stable and flat base!

Electronic equipment is not domestic waste - it must be disposed of properly in accordance with directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL dated 27th January 2003 concerning used electrical and electronic appliances.
At the end of its service life, take this device for disposal at a designated public collection point.

Spent batteries are special waste!
Do not throw spent batteries into your domestic waste; take them to a collection point for spent batteries!

Safety Instructions - Important Notes

Channel assignment

The channels available on the satellites and transponders are subject to continual change. If changes do occur, the new channels have to be set on the receiver because the factory preset programming corresponds to the status on the date of manufacture. The information for these settings can be found on the Internet or in relevant magazines.

Updating the receiver software

Your receiver was equipped in the factory with the latest software version at that time. We are, however, constantly working on adapting the software to the wishes of our customers and to developments in technology. Further information on this can be found in the sections “Main Menu - Service Menu”, “Software Update”.

Product return/original packaging

Please keep the original packaging in case you need to return the product at any time. The receivers are fragile due to their construction and are only adequately protected by the original packaging. If the receiver is not shipped correctly the guarantee/warranty on it will be voided.

Software changes/use of applications

Any modifications to the receiver software, or the use of applications not provided by Kathrein, will invalidate the warranty! You will have to bear the costs yourself for shipping and repairing any receiver that requires attention due to modifications to the software and use of applications other than those provided by Kathrein!
Therefore exclusively use only software and applications provided by Kathrein for your receiver. These are available by downloading from the satellite or from our Internet pages (www.kathrein.de).

Ventilation slots on the unit

Make sure that the ventilation slots on the unit are not covered in any way. Otherwise the unit may overheat.

There is a risk of fire!

Power supply unit

The power supply unit and the receiver are for indoors use only! Use the power supply unit supplied with the receiver. The use of any power supply unit may damage the receiver.

There is a risk of fire!

The original power supply unit may differ from that illustrated

Safety Instructions - Important Notes

Switching the receiver off

Before you switch the receiver using the power switch, you must switch the remote control into stand-by mode by pressing the stand-by button (on/off). In standby mode, any changed or new data that are broadcast will be saved by the receiver. Once the receiver is in standby mode it can be fully switched off at any time at the power switch at the front of the unit.

Do not switch the receiver off at the power switch directly from operating mode! This can lead to a loss of data and corruption of the software.

Information on Audio MPEG Inc. and S.I.SV.EL, S.P.A:

This unit makes use of legally protected technologies, which are protected by patents in the USA and also by other intellectual property rights in other countries.
KATHREIN-Werke KG has obtained licences from Audio MPEG Inc. and Societa' Italiana per lo sviluppo dell'elettronica, S.I.SV.EL, S.P.A to use these technologies. These licences carry certain restrictions, which apply also to you as the customer. Accordingly this unit may only be used by the end customer for private non-commercial purposes and for the licensed content. It may not be used for commercial purposes. The use of products or processes that are sold or used with this unit is not included in this statement. The use of reverse engineering is not permitted in respect of the licensed technologies, nor is disassembly.

Miscellaneous

The information in this operating manual was correct at the time of going to print. We reserve the right however to make changes at any time and without prior notice. If new software is released for your receiver, and this affects the information in the operating manual (e.g. changes to the menus and/or functions), if we believe it necessary we will make available a new operating manual for download under "www.kathrein.de".

Make a note of the receiver's basic settings (these are set during the first installation), so you can restore them if necessary!

Included in the software for this receiver is software that is licensed under the GNU (General Public Licence). The source code of the program is obtainable under: www.kathrein.de/linux/receiver/ufs900

The term DiSEqC™ used in this operating manual is a registered trade mark of the European Telecommunication Satellite Organisation (EUTELSAT).

DOLBY DIGITAL

Manufactured under licence from Dolby Laboratories. "Dolby" and the double-D symbol are registered trademarks of Dolby Laboratories.

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

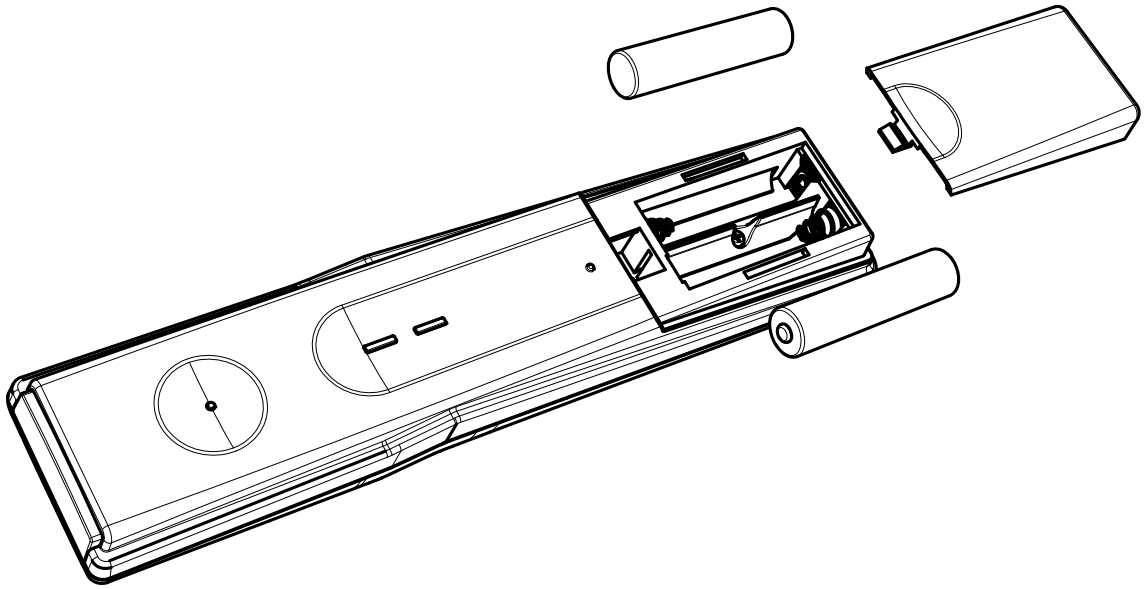
Connection and setup

Scope of supply

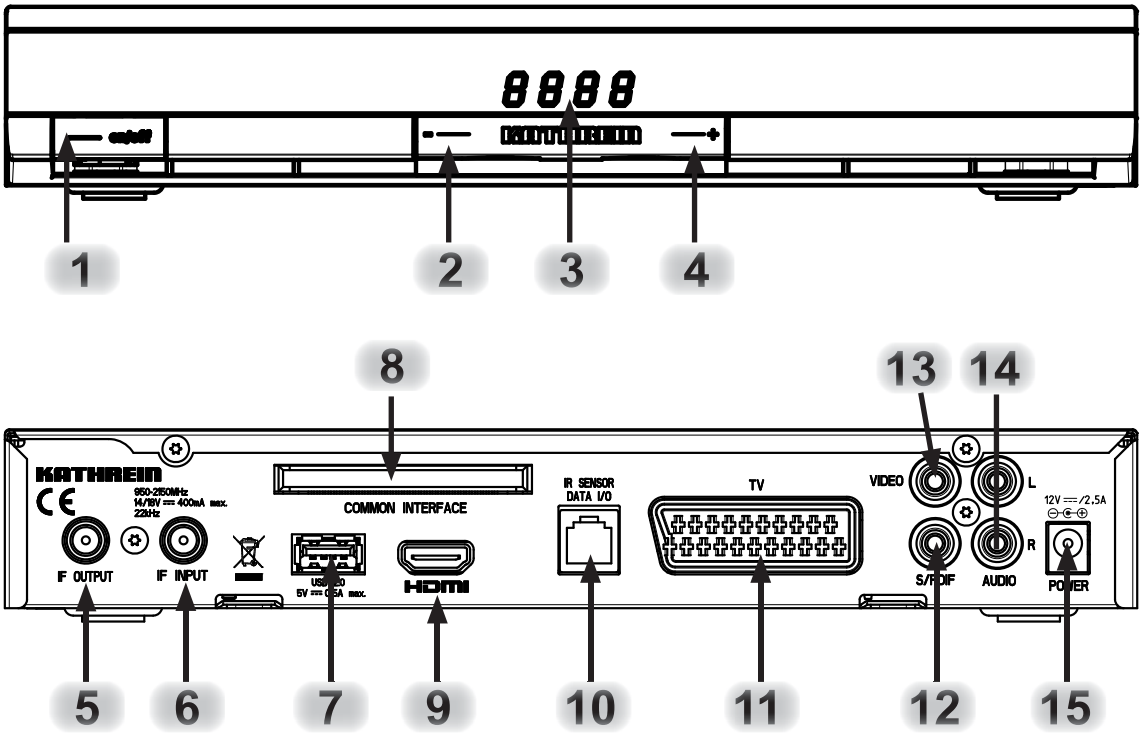
- UFS 900sw
- Remote control RC 671
- HDMI cable
- 2 batteries AAA 1.5 V
- Power supply unit 230 V/12 V
- Operating Manual
- Safety instructions (multi-lingual)

Inserting batteries into the remote control

Remove the cover on the rear of the remote control. Insert the two batteries supplied into the remote control. Ensure correct polarity of the batteries; the + and – markings as indicated inside the battery compartment. Slide the cover back onto the housing until it locks in place.



Front/rear view of the receiver



1. On/Off switch [1)]
2. Channel selection (P-)
3. 4-character display
4. Channel selection (P+)
5. RF(IF) loop-through output
6. RF(IF) input
7. USB 2.0 port (USB-A connector)
8. Common Interface for one CA module for Pay-TV cards [2)]
9. HDMI connection
10. Data interface (only for service), optionally for an infrared sensor (not included)
11. Scart socket for TV connection
12. Digital data stream output (S/PDIF = Sony/ Philips Digital Interface Format) for Dolby Digital AC 3 audio
13. Video output (composite colour)
14. Audio outputs (L/R) - cinch sockets
15. Power supply connection (12 V)

[1)] The unit is not fully disconnected from the mains (see the sections “Safety Instructions - Important Notes” and “Periods of extended absence, thunderstorms, mains socket accessibility”)

[2)] CA module and Smartcards are not included with this product

HDMI = High-Definition Multimedia Interface (digital interface for video and audio)

RF(IF) = Intermediate frequency - satellite signal for the receiver converted by the LNB

LED in the front panel display:

The LED lights up:

Red Receiver is in stand-by mode
Green Remote control has been pressed

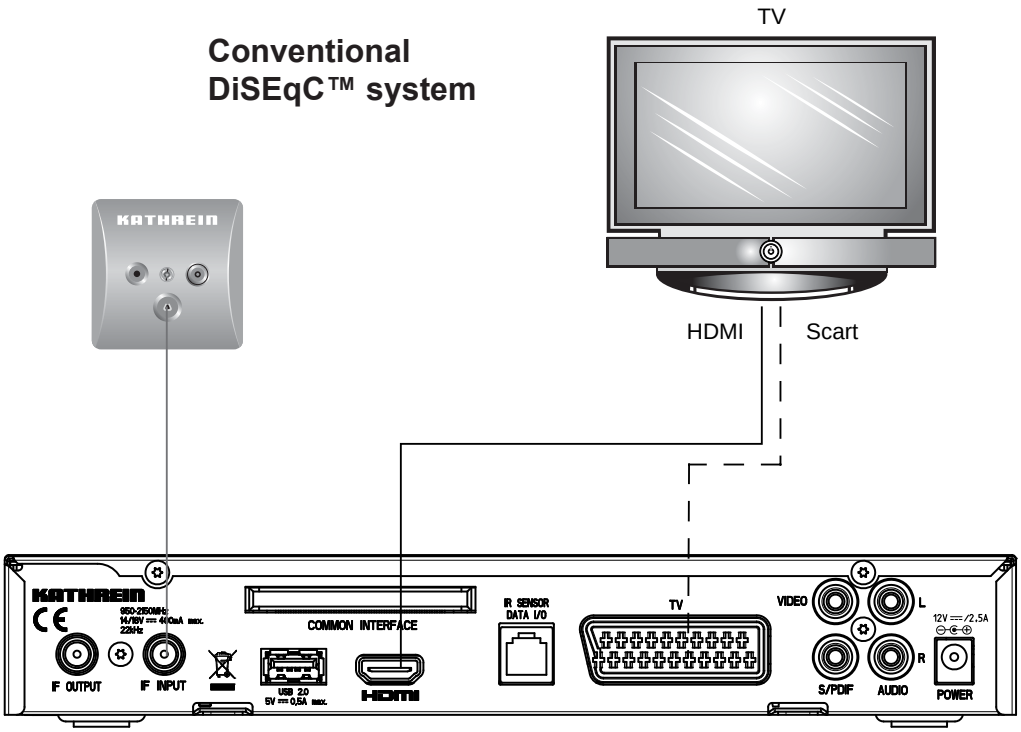
Display in the front panel:

Rec Recording in progress
Display flashing Timeshift in progress

Connecting the receiver

If you do not know the configuration of your satellite reception system, contact your specialist dealer.

Connect the Sat IF inputs on the receiver to the satellite reception system.
Use coaxial cable with an F standard connector (see illustration on right).



Connection and setup

TV connection

Connect the satellite receiver (HDMI or alternatively TV Scart socket) and the TV set using an HDMI or Scart cable (see “Connection example”).
For system reasons, the same video signals are present at both the TV Scart socket and also the video cinch output.

Audio connection

Digital

There are two ways you can access the digital audio.

HDMI

The stereo audio is transmitted to your TV set via the HDMI interface. If your TV set also supports Dolby Digital, you can also receive the Dolby Digital audio via the HDMI interface (providing it is broadcast by the channel provider). On this issue refer to the operating manual for your TV set.

S/PDIF Dolby Digital output

The S/PDIF output is intended for the connection of a Dolby Digital system (see “Advanced connection example” in the technical appendix). Connect the S/PDIF output and the Dolby Digital system using an appropriate cable.

Analogue

If you want to play the sound on your hi-fi system, connect the audio cinch sockets to the input sockets on the hi-fi system, using an appropriate cable (see “Advanced connection example” in the technical appendix).

First installation

Before you start to use the UFS 900, read the sections "Safety Instructions - Important Notes", "Important Information" and "Connection and Set-Up" through to the item "First installation".

Do not connect the unit to the mains until all installation work has been properly carried out.

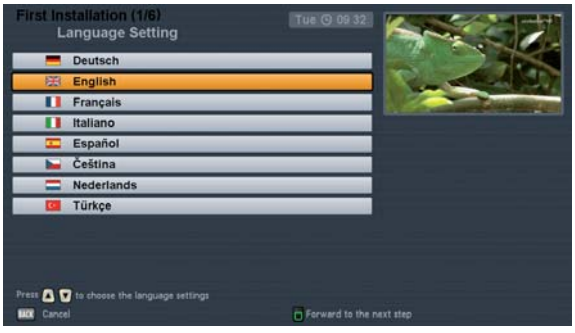
The guidance provided in the "First installation" section assumes that the receiver has been properly connected as per the "Safety Instructions - Important Information" and "Connection and Set-Up" sections through to the "First installation" section.

Required buttons on remote control for initial installation:

0 ␣ ... 9 wxyz	Numerical input	PIP (green)	Proceed to next step in the first installation
FAV (red)	Go back one step in the first installation	OK	Confirm the changed values/setting
	Select/change individual menu parameters, navigation		
BACK	Cancel input, go back		

First switch your TV set on and select the AV/HDMI input you have used to connect the receiver to your TV set. Switch on the receiver at the power switch on the front of the unit. Undertake the first installation. If you have any questions or encounter problems, contact your specialist dealer.

The following on-screen display appears:

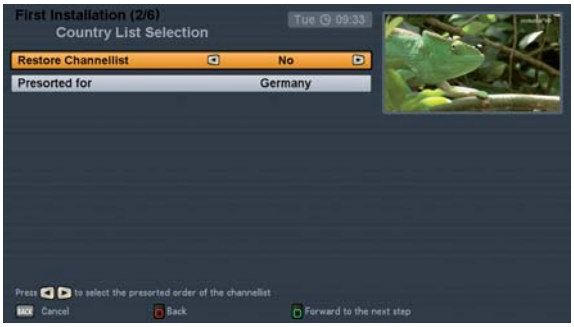


Tip! **Always check the bar at the bottom of the on-screen display. This provides information on what to do next.** Tip!

Use the ▲ ▼ buttons to select the desired menu language for your receiver and confirm your selection using the OK button. The selected language will be given a coloured background. The following languages

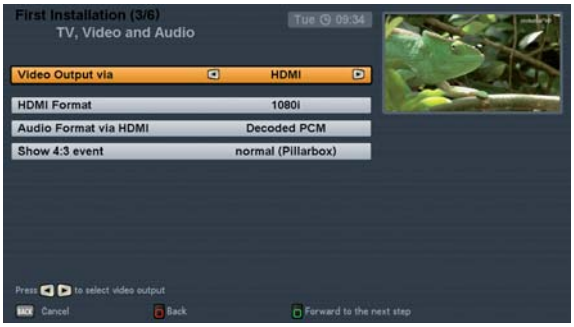
are available: German, English, French, Italian, Spanish, Czech, Dutch and Turkish.

Press the PIP (green) button to move to the next menu. The following on-screen display appears:



Use the ◄ ► buttons to select whether to replace the factory pre-programmed channel list by a pre-sorted channel list for a specific country (at present only a limited number of pre-sorted channel lists are available). If you prefer to use the factory pre-programmed channel list, choose “No” under “Restore Channellist”.

Press the PIP (green) button to move to the next menu. The following on-screen display appears:



Use the ▲ ◄ ► ▼ buttons here to select the basic settings for the video and audio output from the receiver to the TV set.

During this process refer to the operating manual for your TV set and take care to select only those settings that your TV set can process.

Video Output via

Select the connection on the receiver to which you have connected your television.
Either

HDMI or SCART

HDMI Format

Here you can select the video resolution that will be sent to your TV set. Either:

- 1080i (resolution 1920 x 1080, half-screen images)
- 576p (resolution 720 x 576, full-screen images) or
- 720p (resolution 1280 x 720, full-screen images)
- Automatic

Audio Format via HDMI

Here you can select the type of audio signal that is transmitted by the HDMI interface. Select the signal that your TV set can process:

- Decoded PCM or
- S/PDIF format

Show 4:3 event

Here you can select the type of screen display mode for 4:3 broadcasts on a 16:9 TV set:

- normal (Pillarbox)
- stretched (Full Screen) or
- zoom in (Pan & Scan)

TV aspect ratio

Here you can select the TV picture format. Either:

- 4:3 or
- 16:9

Picture format

Select the type of screen display, depending on your setting for the TV aspect ratio:

- TV aspect ratio “4:3”: Pan & Scan or Letterbox
- TV aspect ratio “16:9”: Always 16:9 or Automatic

TV Scart signal output

Select the type of video signal at the TV Scart socket here. Select the signal that your TV set can process:

- CVBS – Colour Video Baseband Signal or
- RGB – Red/Green/Blue signal

Television System

Here you select whether your TV set is a

- PAL or
- NTSC

set. If you don’t know which it is, select the setting “AUTO” for automatic.

Press the PIP (green) button to move to the next menu.

PAL and NTSC are TV standards. NTSC is used primarily in the North American region.

The following on-screen display appears:

Tip!

If your receiver is connected as in the connection example (see "Connecting the receiver" in this section), no changes are necessary in the rest of the first installation. If you are not familiar with the details of your reception system, note the following:

In many cases the satellite reception system is a DiSEqC™1.0 system. This type of system is preadjusted. Confirm the rest of the on-screen displays during the first installation using the PIP (green) button. You cannot damage your reception system during this process! If you do not receive a TV picture at the end of the first installation, contact your specialist dealer.

Tip!

You should perform the tuner configuration/make changes yourself only if you are fully familiar with the particulars of your reception system.

You can set up the antenna (tuner) configuration for the following types of reception systems:

- LNB only
- DiSEqC™1.0
- Single-cable system

Continue as described in the initial installation for the type of reception you have selected.

LNB only

The individual items are selected using the ▲▼ buttons. If you need to access sub-menus, they can be called up using the OK button. The changes to the current settings can be performed using the ◄► buttons or the number pad.

The following on-screen display appears:

Select the satellite

Use the ◄► buttons here to select the satellite whose signal is present at the tuner.

LNB Type

If your reception system does not have a Universal LNB, use the ◄► buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:

- Universal or
- Single

LNB Low Frequency

You only need to specify this data if your LNB type is not “Universal LNB”. For this, refer to the documentation supplied with your LNB. Enter the LNB low frequency, using the numeric pad or the ◄► buttons.

LNB High Frequency

You only need to specify this data if your LNB type is not “Universal LNB”. For this, refer to the documentation supplied with your LNB. Enter the LNB high frequency, using the numeric pad or the ◄► buttons.

LNB = Low Noise Block converter (feed system)

22 kHz Signal

This cannot be set and is not required

LNB Power

This is factory-set to “On”, but must be changed of your LNB has its own power supply. In most cases the LNB power supply is provided by the receiver.

Test transponder

Select the “Test transponder” field. Here you can select a transponder for checking whether your settings are correct using the signal strength bar and signal quality bar.

When you have completed all settings, press the

(green) button.

The receiver will automatically display the screen for the channel search. Continue the first installation with the “Channel Search” section.

DiSEqC™1.0

The individual items are selected using the ▲▼ buttons. If you require to access submenus, they can be called up using the OK button. The changes to the current settings can be performed using the ◄► buttons or the number pad.

Number of Satellites

Use the ◄► buttons to select how many satellites (max. 4) you would like to receive with your reception system.

Satellite selection/setting

Then use the ▲▼ buttons to select the first satellite slot. Press the OK button to open the menu for the satellite settings. The following on-screen display appears (example):

Satellite

Use the ◄► buttons to set the desired satellite (selection from 17 pre-programmed options).

LNB Type

If your reception system does not have a Universal LNB, use the ◄ ► buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:

- Universal or
- Single

LNB Low Frequency

You only need to specify this data if your LNB type is not “Universal LNB”. For this, refer to the documentation supplied with your LNB. Enter the LNB low frequency, using the numeric pad or the ◄ ► buttons.

LNB High Frequency

You only need to specify this data if your LNB type is not “Universal LNB”. For this, refer to the documentation supplied with your LNB. Enter the LNB high frequency, using the numeric pad or the ◄ ► buttons.

22 kHz Signal

You only need to specify this data if your LNB type is “Single”. The 22 kHz signal is needed to switch LNBs when using multi-feed reception and to switch between Low and High band. For this, refer to the documentation supplied with your LNB.

LNB Power

This is factory-set to “On”, but must be changed of your LNB has its own power supply. In most cases the LNB power supply is provided by the receiver.

Test transponder

To check whether the settings that you have made are correct, use the ▲ ▼ buttons to move to the “Test transponder” field. Use the ◄ ► buttons to select the required transponder from the various ones listed. If your settings are correct, you will see at the top right of the screen the live signal of a channel from the currently selected transponder.

If you do not receive a signal, check your settings again and if necessary call for expert help.

You have now completed all settings for the first satellite. Press the PIP (green) button to return to the “Satellite Selection Menu” and perform the settings in the same way for the remaining satellites.

When you have finished configuring the satellite, press the PIP (green) button. The receiver then automatically calls up the selection menu for the channel search. Continue the first installation by selecting “Execute Channel search”.

LNB = Low Noise Block converter (feed system)

One Cable

The individual items are selected using the ▲▼ buttons. If you require to access submenus, they can be called up using the OK button. The changes to the current settings can be performed using the ◄► buttons or the number pad.

Number of Satellites

Use the ◄► buttons to select how many satellites (max. 2) you would like to receive with your reception system.

If you use a UAS 481 (single cable LNB) in your reception system, you are only allowed to select one satellite.

Then use the ▲▼ buttons to select “Configure satellites” and confirm by pressing the OK button. The following on-screen display appears (example):

Satellite

Use the ◄► buttons to set the desired satellite (selection from 17 pre-programmed options).

LNB Type

If your reception system does not have a Universal LNB, use the ◄ ► buttons to select the LNB types that are used in your reception system. You can choose from the following LNB types:

- Universal or
- Single

LNB Low Frequency

You only need to specify this data if your LNB type is not “Universal LNB”. For this, refer to the documentation supplied with your LNB. Enter the LNB low frequency, using the numeric pad or the ◄ ► buttons.

LNB High Frequency

You only need to specify this data if your LNB type is not “Universal LNB”. For this, refer to the documentation supplied with your LNB. Enter the LNB high frequency, using the numeric pad or the ◄ ► buttons.

Test transponder (this works only after a new registration)

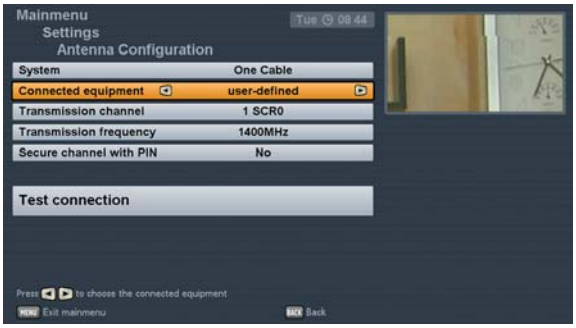
To check whether the settings that you have made are correct, use the ▲ ▼ buttons to move to the “Test transponder” field. Use the ◄ ► buttons to select the required transponder from the various ones listed. If your settings are correct, you will see at the top right of the screen the live signal of a channel from the currently selected transponder.

If you do not receive a signal, check your settings again and if necessary call for expert help.

You have now completed all settings for the first satellite. Press the OK button. If at “Number of Satellites” you selected two satellites, first follow the same procedure to perform the settings for the second satellite.

When you have finished the satellite configuration, press the OK button. The receiver automatically switches back to the “Antenna Configuration” overview. Now use the ▲ ▼ buttons to select the “New registration” line and press the OK button to confirm.

The individual items are selected using the ▲ ▼ buttons.
The changes to the current settings can be performed using the ◄ ► buttons or the number pad.



Connected equipment

Use the ▲ ▼ buttons to select the single cable system used in your reception system:
Either:

- KATHREIN UAS 481 (single-cable LNB),
- KATHREIN EXR 551,
- KATHREIN EXR 552,
- KATHREIN EXR 4 (Kathrein single cable matrices for four subscribers),
- KATHREIN EXR 8 (Kathrein single cable matrices for eight subscribers),
- KATHREIN EXU 908 or
- User-defined (for all single-cable systems not covered by any of the above specifications)

Refer to the documentation supplied with your system for the settings for the SCR, frequencies and any PIN assigned to the tuner. You will find there a printed list showing the assignment between the various SCRs and the respective transmission frequencies. It may happen that you cannot freely select the PIN for protection of individual frequencies; this also may be listed in the documentation for the single-cable components.

Please note also that multiple receivers cannot share the same frequencies/ channels - the receivers would interfere with each other.

Transmission channel

Select a free available transmission channel.

Transmission frequency

If not preset by the receiver, select here one of the free available transmission frequencies.

See example on the right (EXR 551) for assignment of a transmission channel to a transmission frequency.

EXR 551
20510024

1 = SCR(0) 1400 MHz
2 = SCR(1) 1516 MHz
3 = SCR(2) 1632 MHz
4 = SCR(3) 1748 MHz

SCR = Satellite Channel Router (transmission channel)

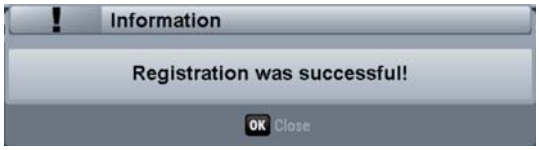
Secure channel with PIN (not possible in every system)

If your single cable system allows the transmission frequency to be protected by entering a PIN, this is the menu where that can be done. No other receiver can then use this transmission frequency unless the PIN is entered.

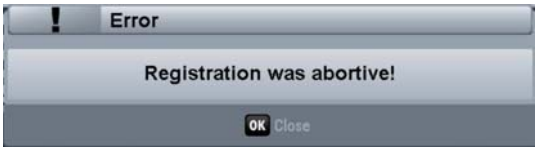
Select the setting “Yes”. You then have the facility of using the number keys to input a PIN code (0-255) in the line beneath “Password PIN”.

Test connection

Press the OK button to test the connection. The following on-screen display appears:



Press the OK button to confirm the displayed message. Then press the BACK button to return to the Antenna Configuration menu. Now press the PIP (green) button. The receiver will automatically display the screen for the channel search. Continue the first installation with the “Channel Search” section.



Press the OK button to confirm the displayed message. If no connection can be established to the single-cable system, check your settings (transmission channel) and if necessary call for expert help.

Channel Search

The individual items are selected using the ▲ ▼ buttons. Changes to the current settings can be made using the ◄ ► buttons.

If you do not wish to perform a channel search, press the PIP (green) button and continue with the “Date and time” section of the first installation.

If you want to perform a channel search, use the ◄ ► buttons to select “Yes”.

Channel Search Mode

Use the ◄ ► buttons to select the type of channels that are to be searched for. You have three options:

- “free and scrambled” All channels are searched for
- “only free” Only free-to-air channels are searched for
- “only scrambled” Only encrypted channels are searched for

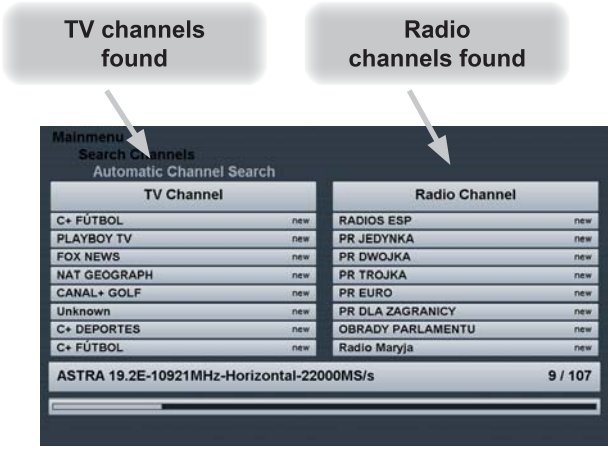
To view encrypted channels you need an appropriate CA (Conditional Access) module and a valid smart card together with a valid subscription to the relevant Pay TV provider.

Pay TV = Pay-per-View (such as Sky or Arena)

Network Search

Use the ◄ ► buttons (On/Off) to select whether a network search should be performed. If you set the network search to “Off”, only the factory default transponders for the satellite(s) you previously selected will be searched for new as yet unsaved channels. If you set the network search to “On”, the transponder network enables additional transponders that have not yet been stored to be located. They are then stored and searched for new channels in the same way as the existing transponders.

When you have completed all settings, press the PIP (green) button. The following on-screen displays appear (example):



During the search you will see the following on-screen display (example):

Newly found channels are identified with the suffix “New” (see screenshot example, right).

Note:
You can cancel the search at any time by pressing the BACK button.

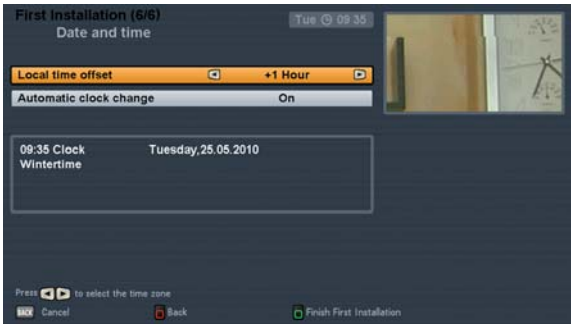
After completion of the search, you will see the following on-screen display (example):

Press the OK button. The newly found channels are added at the end of the existing complete list.

Transponder = frequency converter (see Short Technical Guide)

Date and time

The individual items are selected using the ▲▼ buttons. Changes to the current settings can be made using the ◄► buttons.



Local time offset (GMT)

Here you can select the local time offset to UTC (formerly GMT) (e.g. for Germany: + 1 hour). You can set the offset in 1 hour steps. The maximum offset is 12 hours (+ and -).

Automatic clock change (Summer Time)

Here you can select whether the receiver should automatically change over to and from summer and winter time. Either:

- On or
- Off

If you select “Off”, “Summertime” will be displayed in the line below. Here you manually set the time of the receiver to summer time (selection “Yes”). If “Summertime No” is selected, winter time is automatically selected.

GMT = Greenwich Mean Time (time zone +0)

UTC = Universal Time Coordinated, the successor to GMT

Common Interface

Important information

Always follow the operating instructions from your Pay TV provider and the instructions supplied with the smart card and the CA module!

Smart cards and CA modules are not included with this product!

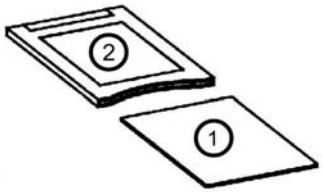
The cards and modules are issued by the respective pay TV providers, and contain the subscriber data and details of the channels for which the subscriber has paid. These channels are always scrambled.
Contact the Pay TV provider if you are interested in subscribing to a particular Pay TV channel.

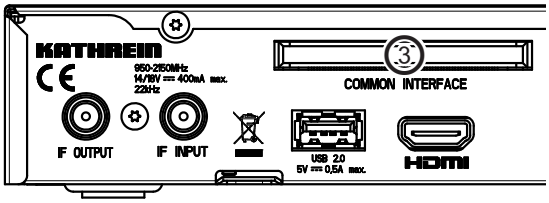
You are responsible for the use of the smart card in the CA!

The smart card sold by the Pay TV provider, specific to a particular encryption technology, is inserted into the CA module.

Store your card and PIN code securely when not in use!

Inserting the smart card and the CA module





Inserting the CA module into the CI

The Common Interface (CI) (3) of the UFS 900sw is suitable for insertion of a CA (Conditional Access) module and is located at the rear of the receiver. The CA module (2) holds the smart card (1) (chip contacts pointing downwards and towards socket strip) and is then inserted in the CI slot (3). The smart card should be inserted into the CA module without exerting excessive force. This also applies to inserting the CA module into the CI slot!

Do not use a excessive force and follow the instructions supplied with the smart card and the CA module. To remove the CA module, pull it out straight to the rear.

Remote control for live operation (TV/Radio)

Currently unavailable

Number pad

Call up main menu

Volume “-” (softer)

Mute

FAV = Call up favourites list

PIP = 1 x display of 4:3 broadcast

PIP = 2 x HDMI format

Call up EPG (Electronic Programme Guide)

Select last channel called up, exit on-screen displays/ menus step by step

◄◄ = Fast Rewind

► = Start playback/ Call up recording archive

►► = Fast Forward

Operation (on)/standby (off)

Call up teletext

Volume “+” (louder)

Channel selection

Call up channel information (info banner and detailed information)

OPT = Call up options menu

TV/R = Switch between TV/radio mode

Calling up the recording archive

= Navigation/channel or change channel option

OK = Call up channel list, confirmation/call up selection

Call up the Media Centre

❚❚ = Pause/Start Time-shift

● = Start recording (OTR)

■ = Stop Playback/ Time-shift/Record

OTR = One Touch Recording

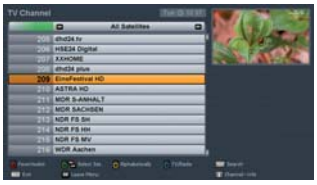
Time-shift = Time shift TV

I want to watch TV ...

- Press VOL + VOL - to increase and decrease the volume
- Press + P - to switch channels
- Press i to display and hide additional channel information
- Press to mute the sound

- Press 0 ... 9 wxyz to enter the channel number directly

- Press OK to call up the channel list,
- Press to select a channel,
- Press OK twice to call up a channel and close the channel list



I want to listen to the radio ...

- Press TV/R (blue) to change to radio mode

- Press VOL + VOL - to increase and decrease the volume
- Press + P - to switch channels
- Press i to display and hide additional channel information
- Press to mute the sound

- Press 0 ... 9 wxyz to enter the channel number directly

- Press OK to call up the channel list,
- Press to select a channel,
- Press OK twice to call up a channel and close the channel list

- Press TV/R (blue) to change back to TV mode

I want to see teletext ...

- Press TEXT to call up teletext

- Press 0 ... 9 wxyz to enter the required page directly

or

- Press ▲ ▼ to page forward/backward

- Press TEXT or BACK to return to TV

I want to watch timeshift TV ...

To watch timeshift TV using the UFS 900sw you must connect an external hard disk *) via the USB port at the rear of the receiver and set it up as described in the section "Mainmenu", "Service", "USB Device Management".

- Press ▪▪ to start timeshift

Made a mistake?

- Press ■ to cancel timeshift

- Press ► to start playback
- Press ◄◄ ►► during playback to wind forward and rewind
- Press ► to return to normal playback speed

- Press ▪▪ to pause playback

- Press ■ to cancel timeshift and return to normal (live) TV

*) Tested only with hard disks from the Kathrein product range (see also: www.kathrein.de → Service → FAQs)

I want to record a programme immediately ...

To make a recording using the UFS 900sw you must connect an external hard disk *) via the USB port at the rear of the receiver and set it up as described in the section “Mainmenu”, “Service”, “USB Device Management”.

- Press the ● (red dot) button to open the “Record” window

- Press OK to start recording the programme immediately

or

- Press ◂▸ to change the duration before recording

Made a mistake?

- Press the ● (red dot) button or BACK to close the window without recording
- Press ■ and OK to stop a recording that is in progress

*) Tested only with hard disks from the Kathrein product range (see also: www.kathrein.de → Service → FAQs)

I want to record a programme that is scheduled for later (timer list)

To make a recording using the UFS 900sw you must connect an external hard disk *) via the USB port at the rear of the receiver and set it up as described in the section “Mainmenu”, “Service”, “USB Device Management”.

- Press the EPG button to open the Programme Guide

- Press the ◄◄ ►► button to select a channel

- Press to select the desired programme

- Press the ● (red dot) button to open the “Record” window

- Press OK to start recording the programme

or

- Press to change the recording mode date, start, end and duration before recording

- Press EPG or BACK to return to TV

*) Tested only with hard disks from the Kathrein product range (see also: www.kathrein.de → Service → FAQs)

I want to play back a recording ...

To make a recording and then play it back using the UFS 900sw you must connect an external hard disk *) via the USB port at the rear of the receiver and set it up as described in the section "Mainmenu", "Service", "USB Device Management".

- Press ► (or ARCHIVE) to open the recording archive

- Press ✥ to select a recording
- Press OK twice to start playback and exit the recording archive

- Press ◄◄ ►► during playback to wind forward and rewind
- Press ► to return to normal playback speed

- Press ❚❚ to pause playback

- Press ■ to cancel playback and return to the recording archive

- Press BACK to exit the recording archive and return to normal (live) TV

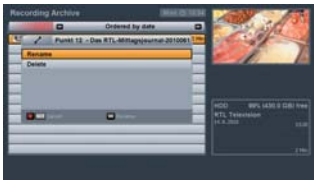
*) Tested only with hard disks from the Kathrein product range (see also: www.kathrein.de → Service → FAQs)

I want to delete a recording ...

- Press ► to open the recording archive

- Press ✥ to select a recording

- Press the ● (red dot) button to open the “Edit” menu



- Press ✥ to select the “Delete” option then OK to confirm
- Respond to the security question by pressing OK to confirm

- Press BACK to exit the recording archive and return to normal (live) TV

Editing and selection options in the menus

In some menus/on-screen displays this box is shown with a particular colour gradation. Each colour gradation stands for a specific view/selection. The colours assigned to the buttons are shown in the table below. Where the functions of these buttons are assigned for the current menu/view, they are also shown in the line at the bottom of the on-screen display.

	Colour	Button on the remote control
	Green	PIP
	Yellow	OPT
	Red	FAV
	Blue	TV/R

Tip!

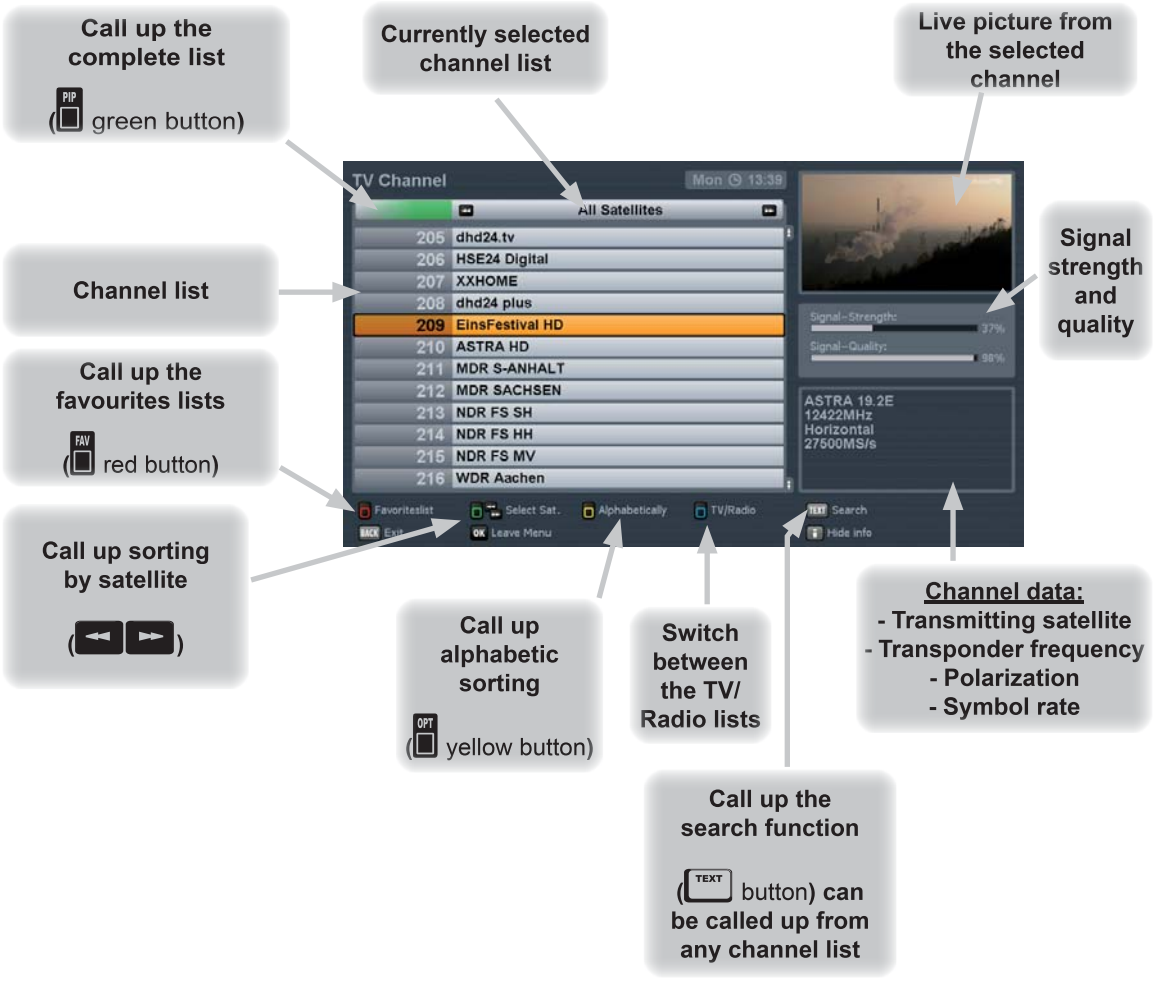
Always check the bar at the bottom of the on-screen display. This provides information on what to do next.

Tip!

In many menus, all the editing and selection options for that menu are shown at the bottom of the on-screen display. Where a specific remote control button is required for executing them or calling them up, this also will be shown (see example screenshot above).

Channel selection from the channel list

Press the OK button to open the channel list. The following on-screen display appears:



Information on selecting favourites lists:

You can also call up the favourites lists directly from TV screen, using the FAV (red) button. Then use the cursor buttons (✥) to select the desired favourites list and confirm your selection using the OK button. The receiver automatically selects the first channel saved in the favourites list and returns to the TV screen. You can now select the sequence of channels saved in the selected favourites list, using the +/- buttons.

Now use the respective coloured button to select the category in which you wish to open a channel list:

FAV (red) button: Call up the "Favoriteslists" category

Contains the following channel lists:
- Favoriteslists 1-8

PIP (green) button: Call up the "Complete List" category

Contains the following channel lists:
- Complete list
- Channel lists sorted by satellite

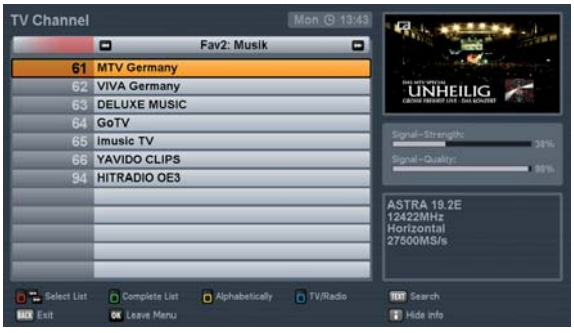
OPT (yellow) button: Call up the alphabetically sorted lists

Contains the following channel lists:
- A-Z
- Z-A
- 0-9
- Ordered by individual letters

Channel list selection:

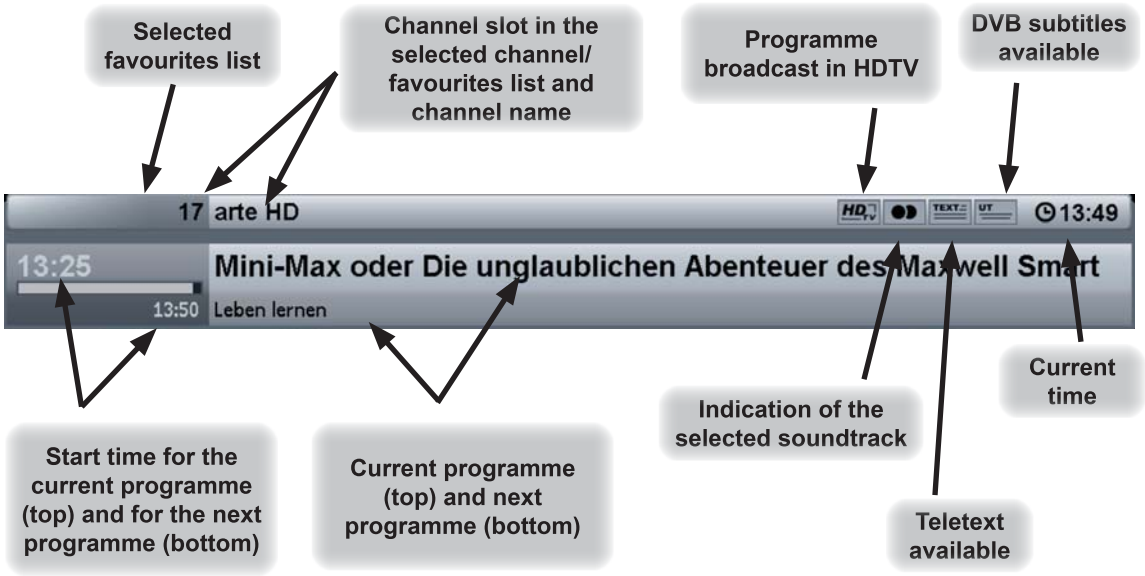
Use the ◄◄ ►► buttons to scroll through the currently available channel lists.

Select the channel:
After selecting the desired channel list, the desired channel is selected using the cursor (✣) buttons and called up using the OK button. To exit the channel list and return to the TV picture, press the OK button again, or press the BACK button.



Channel Information

Channel information is shown for a few seconds each time the channel is changed (this can be changed under “Settings”, “User-Defined Settings”, “Customize Screen Menu”) or displayed continuously by pressing the i button.

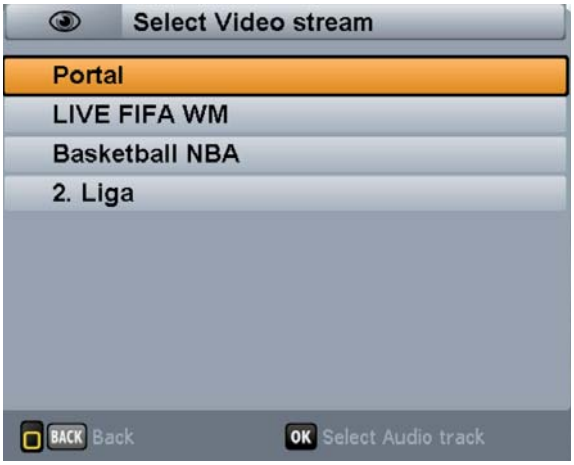

Selected favourites list
Channel slot in the selected channel/ favourites list and channel name
Programme broadcast in HDTV
DVB subtitles available
17 arte HD
13:49
13:25
Mini-Max oder Die unglaublichen Abenteuer des Maxwell Smart
13:50
Leben lernen
Current time
Indication of the selected soundtrack
Start time for the current programme (top) and for the next programme (bottom)
Current programme (top) and next programme (bottom)
Teletext available

The following icons (symbols) may appear in the channel information:

HD TV	Programme broadcast in HDTV		Audio selection is: Stereo
OPT	Portal channel (channel options available)		Audio selection is: Surround Sound
DOLBY DIGITAL	Dolby Digital soundtrack selected	UT	Subtitles are available
	Audio selection is: Mono left	TEXT	Teletext is available
	Audio selection is: Mono right		

Calling up the channel options

Portal channels bundle together several channel options. After selecting the portal channel, press the OPT (yellow) button, press the ▲▼ buttons to select “Picture selection” and press the OK button to confirm your selection. The following on-screen display then appears (example):



Press the ▲▼ buttons to select your desired channel option, and press the OK button to confirm your selection. Press the OPT (yellow) button or the BACK button to exit the “Select options” display.

Select Audio track

Press the OPT (yellow) button, use the ▲▼ buttons to select “Select Audio track” and press the OK button to confirm your selection. The following on-screen display then appears (example):

Use the cursor (✣) buttons to select your desired soundtrack option, and press the OK button to confirm your selection.

Select subtitle

If the channel OSD includes the following symbol for subtitles UT, you can call up the “Subtitle” function as follows: Press the OPT (yellow) button, use the ▲▼ buttons to select “Subtitle” and press the OK button to confirm your selection. The following on-screen display then appears (example):

Use the ▲▼ buttons to select the desired subtitles and confirm by pressing the OK button. The receiver will automatically return to the TV picture.

Videotext (Teletext)

This symbol TEXT in the channel OSD shows you whether teletext is available for the selected channel.

When you press the TEXT button, the receiver processes the videotext/teletext service data for your TV set to display, even when the signal is encrypted.

During the search, the page which is being searched for is displayed in the top left-hand corner with the time and date displayed at the top right. When the search is finished, the teletext broadcast by the relevant encrypted channel provider appears.

You have several options for opening the desired pages:

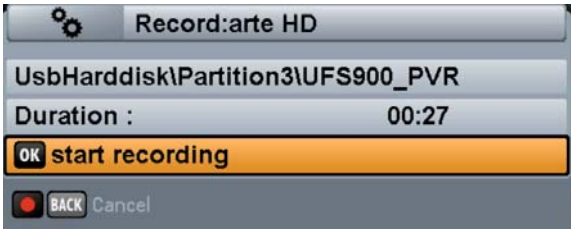
- Entry using the number pad.
- Scroll backwards and forwards using the ▲ ▼ buttons
- Scroll up and down in the sub-pages (e.g. 1/2 and 2/2) using the ◄◄ ►► buttons

- Select using the options indicated by the coloured buttons FAV (red), PIP (green), OPT (yellow) and TV/R (blue) listed across the bottom of the screen

Press BACK or TEXT to exit teletext.

One-Touch Recording (OTR) - recording directly to a hard disk *)

To start recording directly to the hard disk, press the ● (red dot) button. The following on-screen display appears (example):



Use the ▲▼ buttons to select the lines to be changed; make the changes using the ◄► buttons.

Duration:

The duration of a recording is determined automatically by the receiver, based on the start and finish times. You can however correct the duration manually. In this case the receiver automatically adjusts the end time to correspond to the new recording duration.

Press the OK button to start the recording - you can cancel it by pressing the BACK or the ● (red dot) button. After the recording has started, if you want to stop it you must press the ■ button and then the OK button to confirm.

See the section “Recording Archive” for details of how to pay back a recorded programme.

*) Tested only with hard disks from the Kathrein product range (see also: www.kathrein.de → Service → FAQs)

Electronic Programme Guide (EPG)

General information on the programme guide

What is the electronic programme guide:

The electronic programme guide (in the following section referred to as the EPG for short) provides all programme information free of charge (EPG data) and informs you up to a week in advance. However, this programme information must be broadcast by the related channel provider. If no EPG data are available the receiver, instead of showing information on the current programme, shows the message “No data available”.

EPG data update

The EPG data for the currently selected channel are updated automatically in the background while you are watching a TV channel.

Where are the EPG data stored/saved?

The data are saved on the archive hard disk *) that is connected and has been set up (see Main menu/ Service/USB device management). These data are loaded after the receiver is started.
The full scope of the EPG is accessible only when the archive hard disk is connected and has been set up.

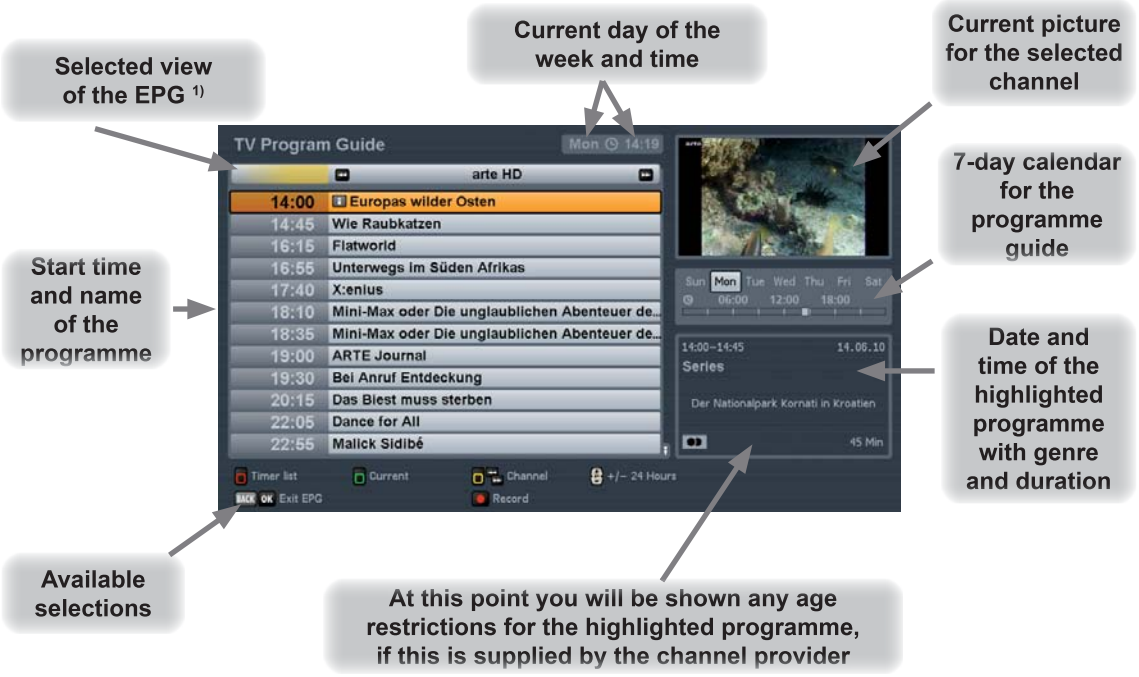
The EPG data are not available immediately after first installation. The EPG data will only be updated when a channel is watched.

*) Tested only with hard disks from the Kathrein product range (see also: www.kathrein.de → Service → FAQs)

Electronic Programme Guide (EPG)

Calling up the EPG

The EPG is called up by pressing the EPG button. Each time the EPG is called up, you will automatically be shown the “Preview” view (yellow) irrespective of which view you were shown the last time you exited the EPG. The following on-screen display appears (example):


Selected view of the EPG 1)
Current day of the week and time
Current picture for the selected channel
7-day calendar for the programme guide
Start time and name of the programme
Date and time of the highlighted programme with genre and duration
Available selections
At this point you will be shown any age restrictions for the highlighted programme, if this is supplied by the channel provider
TV Program Guide
Mon 14:19
arte HD
14:00 Europas wilder Osten
14:45 Wie Raubkatzen
16:15 Flatworld
16:55 Unterwegs im Süden Afrikas
17:40 X:enius
18:10 Mini-Max oder Die unglaublichen Abenteuer de...
18:35 Mini-Max oder Die unglaublichen Abenteuer de...
19:00 ARTE Journal
19:30 Bei Anruf Entdeckung
20:15 Das Biest muss sterben
22:05 Dance for All
22:55 Malick Sidibé
Sun Mon Tue Wed Thu Fri Sat
06:00 12:00 18:00
14:00–14:45 14.06.10
Series
Der Nationalpark Kornati in Kroatien
45 Min
Timer list
Current
Channel
+/– 24 Hours
BACK OK Exit EPG
Record

1)	Colour	Button on the remote control	View
	Green	PIP	Current
	Yellow	OPT	Programme preview
	Red	FAV	Timer list

Navigation in the EPG (remote control buttons in the EPG)

FAV (red) button	Call up the timer list (display of all pre-programmed recordings)
◄◄ ►► buttons	Navigation in the individual views (e.g. 15 minutes skip forward in the “Current” view)
OPT (yellow) button	Call up a preview of the currently selected channel (Program guide)
+ P − button	(P+) to jump forward 24 hours in the EPG, (P-) to jump backward 24 hours in the EPG (e.g. into “Current” and into “Preview”)
● (red dot) button	Add a programme to the recording settings
i button	Shows any further information on the selected programme
OK, BACK, EPG buttons	Press one of these buttons in the “Preview” or “Current” view to close the EPG and display the selected programme on the TV screen

Navigation within each view is always performed using the cursor (▲▼◄►) buttons. The ▲▼ buttons allow you to select individual channels/ programs, and the ◄► buttons allow you to scroll from page to page in the currently selected list.

Press the EPG or the OK BACK button to exit the EPG and return to the TV picture.

Views using the EPG

“Preview” view (Program guide)

The “Preview” view can be called up at any time in EPG by pressing the OPT (yellow) button.

In the “Preview” view you can see the programs for the currently selected channel. Provided that EPG data has been supplied/transmitted by the channel provider, the receiver displays the programme lists for one week in advance.

You can use the cursor ( ) buttons to select the desired programme and, if available, you can use the i button to open further information on the desired programme.

You can use the ◄◄ ►► buttons to scroll through the programmes in the order of the complete list of programmes; you remain however in the preview.

The + − button allows you to scroll backwards and forwards a day at a time.

Using the ● (red dot) button you can copy the selected programme to the recording settings (see the “Recording settings” section).

“Current” View

The “Current” view can be called up at any time in EPG by pressing the PIP (green) button.

In the “Current” view you can see all channels displayed in the order of the overall channel list. Provided that EPG data has been supplied by the channel provider, the receiver shows for each channel the current program being shown, with start time, finish time, and progress bar.

You can use the cursor ( ) buttons to select the desired programme and if available you can use the button to call up further information on the desired programme.

If you wish to view the programme currently being shown on a channel, you need not exit the EPG, just select the desired channel. At the top right of the screen you will see the current TV picture for the selected channel.

The button allows you to look ahead in 15 minute steps to future programmes on the channels (press the button to return to the current time).

Timer list view

The “Timer list” can be called up at any time in EPG by pressing the FAV (red) button.

You will find a detailed explanation of the timer list in this section under the item “Recording settings”, “Timer list”.

Recording settings (programming the timer)

The (red dot) button allows you to set a programme for recording at any time. The programme to be recorded can be selected in any of the EPG views, provided the (red dot) button appears at the bottom of the on-screen display.

Programme in the EPG:

Select the desired programme and press the (red dot) button. The following on-screen display appears (see example screenshot on the right):

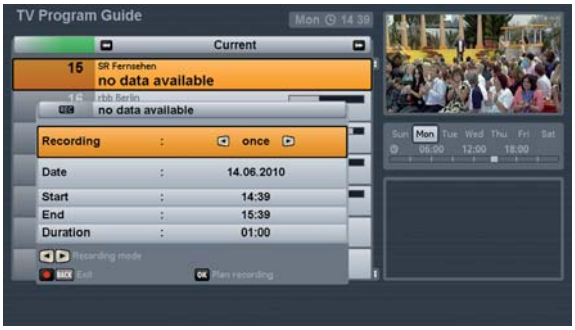
Use the buttons to select the desired recording mode. The following recording mode options are available:

- Once: The recording will be performed once
- Daily: The recording will be performed daily at the time you specify
- Weekly: The recording will be performed once a week on the same day and at the same time

Use the cursor buttons ( ) to select the further items and use the number pad to make the settings. When all settings have been made, press the OK button to save the recording settings. You can view the scheduled recordings in the plan recording view of the EPG (see “Timer list” section).

Programme not in EPG:

Select any programme on the channel on which the desired programme is to be broadcast at a later date, and press the ● (red dot) button. The following on-screen display appears (example):



As there is no EPG data, you must enter the data (date, start, end) manually.

Enter the data using the cursor buttons ( ) or the number pad. In addition, you can also change the duration of the recording. The receiver automatically adjusts the end time for the recording to the duration you have selected. Press the OK button to save your settings.

Recording “once”

Use the ◄ ► buttons to select the “once” recording mode (see screenshot on the right).

Use the ▲ ▼ buttons to switch to the “Date” field and use the ◄ ► buttons to select the desired recording day.

Then use the ▲ ▼ buttons to switch to the selection field “Start” and use the ◄ ► buttons or the number pad to select the desired recording start time.

Then use the ▲ ▼ buttons to switch to the selection field “End” and use the ◄ ► buttons or the number pad to select the desired recording end time. In the next line you can also change the duration of the recording. The receiver automatically adjusts the end time for the recording to the duration you have selected.

When all settings have been made, press the OK button to save the recording settings.

Recording “daily”

Use the ◄ ► buttons to select the “daily” recording mode (see screenshot on the right).

Then use the ▲ ▼ buttons to switch to the selection field “Start” and use the ◄ ► buttons or the number pad to select the desired recording start time.

Then use the ▲ ▼ buttons to switch to the selection field “End” and use the ◄ ► buttons or the number pad to select the desired recording end time. In the next line you can also change the duration of the recording. The receiver automatically adjusts the end time for the recording to the duration you have selected.

When all settings have been made, press the OK button to save the recording settings.

Recording “weekly”

Remember that the day of the week for the desired programme is loaded in the recording schedule and you can make no further manual corrections to it! Therefore, before pressing the OK button, select the programme on the day of the week that you will want to make the weekly recording in future.

Use the ◄ ► buttons to select the “weekly” recording mode (see screenshot above). Then use the ▲ ▼ buttons to switch to the selection field “Start” and use the ◄ ► buttons or the number pad to select the desired recording start time. Then use the ▲ ▼ buttons to switch to the selection field

"End" and use the ◄ ► buttons or the number pad to select the desired recording end time. In the next line you can also change the duration of the recording. The receiver automatically adjusts the end time for the recording to the duration you have selected.

When all settings have been made, press the OK button to save the recording settings.

Timer list

The "Timer list" view can be called up at any time in EPG by pressing the FAV (red) button. The following on-screen display appears (example):

The "Timer list" view shows you all the recordings that are scheduled.

The ◄◄ ►► buttons allow the recordings to be sorted into "once" or "repeated" recordings.

The cursor (✣) buttons allow you to select a recording. The OK button allows you to switch over the channels on which the recording is scheduled. The + − buttons allow you to skip backwards and forwards through the future scheduled recordings, a day at a time.

The ● (red dot) button allows you to delete a recording that had been scheduled.

Timer overlap

If there is an overlap in the scheduling of recordings, the receiver will display the "Timer overlap" warning shown on the right as soon as you try to save the recording settings.

You cannot save/schedule the recordings until you have first resolved the timer overlap.

Timer overlap
Mon rbb Berlin 18:00–18:25
rbb UM SECHS
Mon ANIXE HD 18:00–18:45
Planet der Affen – Zurück in die Zukunft
OK BACK Exit

Recording Archive (Playing Back/Editing Recordings)

Function can be used only when the archive hard disk is connected *) and has been set up.

*) Tested only with hard disks from the Kathrein product range (see also: www.kathrein.de → Service → FAQs)

Calling up the recording archive

The recording archive is called up by pressing the ARCHIVE button or the ► button. The following on-screen display appears (example):

Selected sorting the recording archive

In this "Preview window", you are always shown the current programme on the last channel to be selected, with the channel name.

List of the available recordings, ordered as described above

Statement of the remaining memory capacity of the connected hard disk

Statement of the date, time and duration of the highlighted recording

At this point you will be shown any age restrictions for the highlighted programme, if this is supplied by the channel provider

Recording Archive (Playing Back/Editing Recordings)

Selection options (remote control buttons in the recording archive)

OPT (yellow) button	Select device or partition
◄◄ ►► buttons	Changing the sorting
OK button	Pressing the button for the first time starts the playback in the preview window. If the button is pressed again, playback is continued in full-screen mode
● (red dot) button	Call up the edit menu

Navigation is always performed using the cursor buttons (✥). The ▲ ▼ buttons allow you to select individual recordings, and the ◄ ► buttons allow you to scroll from page to page of the currently selected sort.

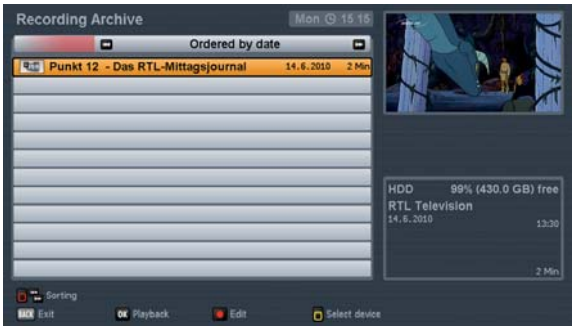
Pressing the ARCHIVE or the BACK button exits the recording archive and returns to the TV picture.

Sorting the recordings

You can sort the recordings by the following criteria:

- Ordered by date
- duration and
- Ordered by title

Press the ◄◄ ►► buttons to switch between the sort criteria.



Recording Archive (Playing Back/Editing Recordings)

Playing back a recording

Use the ▲ ▼ buttons to select the desired recording. Confirm selection of the desired recording by pressing the OK button. Pressing the OK button again exits the recording archive and allows the desired recording to be viewed in full-screen mode.

Playback functions

During playback of a recording you have the following options:

⏸	Pause button	This stops playback; playback can be resumed either by pressing the pause button again or by pressing the play button	
i	Info button	1 x	This displays the playback info with elapsed and remaining times and the channel info plus title, genre etc. for the recorded programme (see screenshot on the next page). To hide the playback info again, press the i button twice
		2 x	This displays the info text recorded with the programme. To hide the info text again, press the i button again
⏩	Fast forward button	Available fast forward speeds: 2, 4, 8, 10, and 20 times. Each time the fast forward button is pressed, the fast forward speed increases another step. Pressing the rewind button reduces the fast forward speed step by step. Press the “Play” button to return to the normal playback speed	
⏪	Rewind button	Available rewind speeds: 2, 4, 8, 10, and 20 times. Each time the rewind button is pressed, the rewind speed increases another step. Pressing the fast forward button reduces the rewind speed step by step. Press the “Play” button to return to the normal playback speed	
▶	Play button	Pressing the “Play” button reverts from fast forward/rewind mode or from pause mode to normal playback and/or shows/hides the progress bar	
■	Stop button	This stops playback or fast forward/rewind and the receiver automatically skips back to the recording archive	
▶	Cursor button (right arrow)	Each time the cursor button (right arrow) is pressed, the playback point in the recording skips 30 seconds forwards	
◀	Cursor button (left arrow)	Each time the cursor button (left arrow) is pressed, the playback point in the recording skips 30 seconds backwards	
OPT	Opt (yellow) button	Call up option selection (sound selection, subtitles, HDMI format ...)	
OK	OK button	Call up the recording archive during playback. The playback continues to run in the preview window	

Recording Archive (Playing Back/Editing Recordings)

You will see this display after starting playback of the recording in full-screen mode or by pressing the [i] button once

You will see this on-screen display during all types of fast forward/rewind or by pressing the [■] button or [►] button

Editing recordings

For selection of a recording, select the desired recording in the selected sort list, using the cursor ( ) buttons.
After selection of the recording(s) to be edited, press the [●] (red dot) button. The following on-screen display appears (see screenshots on the right):

Delete

Deleted recordings are irrevocably deleted and can only be restored by re-recording the programme!

Use the [▲] [▼] buttons to select “Delete” and confirm your selection with the [OK] button.
The selected recording(s) will be deleted.

Rename

Use the ▲ ▼ buttons to select "Rename" and confirm your selection with the OK button.

You can now rename your selected recording.
The following display appears (see example screenshot on the right).
Alphanumeric characters are input as described in "Technical Appendix", "Alphanumeric entries".

Confirm the name you have input by pressing the OK button.

General multimedia information (UFS 900)

In addition to the recording functionality, the receiver offers the following multimedia functions.

- o MP3 playback
- o JPEG display
- o Playback of external recordings (UFS 940, 912, 910, 904, 903, 902, 822, 821)

The data to be played back must be on a USB storage medium connected to the receiver.

Press the MEDIA button to call up the media centre. The following on-screen display appears (example):

The receiver can read only USB storage media that are formatted either as: FAT32 or EXT2

Selecting a partition

If you have connected a USB storage medium with multiple partitions, the desired partition should be selected using the OPT (yellow) button. The following on-screen display appears (example):

Press the ◄ ► buttons to select the desired partition and then press the OK button to confirm your selection.

Partition = an area of the hard disk: When the hard disk was formatted it was divided into multiple partitions

Playing media files (selecting source directory)

Use the ▲▼ buttons to select the source directory. Open using the OK button.

Media data from the following connected devices can be played back:
- USB storage media (FAT32 or EXT2 formatted)

Picture playback

Use the ▲▼ buttons to select the first picture in your slide show. Press the ► button to start the slide show.

During playback, you have the following control options:

▮▮	Pause
►	Start playback after pause
◄◄ ►►	Next/previous picture
■	Slide show is cancelled

MP3 playback

The Media Centre has an integral MP3 player. The MP3-specific information display is based on “IDTag Info V2.3”. Only files from the previously selected folder are played back. Use the ▲ ▼ buttons to select the track with which you want to start your playback. Press the OK button to start the MP3 player.

Information about the currently selected MP3 file (title, artist, album, genre …). This information must be contained in the MP3 file - ID3Tag information!

After the playback has started you will see the following additional display (between the TV picture and the MP3 information):

▮▮	Pause
OK	Start the playback and start the playback after a pause
►	Start random playback
◄◄ ►►	Next/previous song
■	MP3 playback is interrupted

Playing external recordings

The recording to be played back does not necessarily have to have been made on the UFS 900. The UFS 900 can be used to play back recordings made using the Kathrein UFS 821, UFS 822, UFS 902, UFS 903, UFS 904, UFS 910, UFS 912, UFS 940 and UFS 922 receivers.

The selection is made using the ▲▼ buttons. To start playback, press the OK button. The picture of the recording is displayed in the preview window in the top right. Press the OK button again to start the playback in full-screen mode. To cancel playback, press the ■ button.

During playback, you have the following control options:

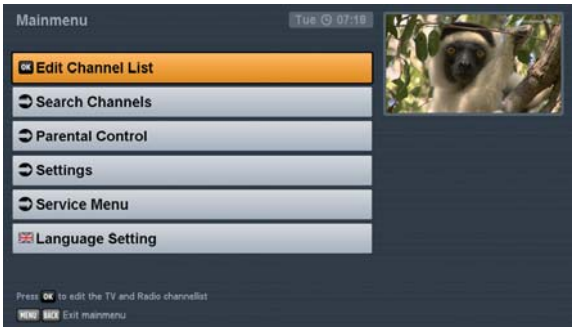
❚❚	Pause
►	Start playback after pause; show/hide playback banner
◄ ►	Skip 30 seconds forwards or backwards
►►	Available fast forward speeds: 2, 3 and 4 times. Each time the fast forward button is pressed, the fast forward speed increases another step. Pressing the rewind button reduces the fast forward speed step by step. Press the “Play” button to return to the normal playback speed
◄◄	Available rewind speeds: 2, 3 and 4 times. Each time the rewind button is pressed, the rewind speed increases another step. Pressing the fast forward button reduces the rewind speed step by step. Press the “Play” button to return to the normal playback speed
■	Cancels playback and displays the Media Centre
OK MEDIA	Media Centre display (playback continues in preview window). Press it again to restart full-screen mode.
i	Show/hide playback info banner

Calling up the main menu and introduction

The main menu is called up by pressing the MENU button. The following on-screen display appears:

The programme showing on the currently selected channel always appears in the top right-hand corner of the main menu.

The selected menus, sub-menus and items, as well as the parameters to be set, are each marked in colour.



Tip! **Always check the bar at the bottom of the on-screen display. This provides information on what to do next.** Tip!

The sub-menus are selected using the ▲▼ buttons and called up using the OK button. Use the ▲▼ buttons also to select the sub-menu items. The settings of the various parameters in the individual items are made using the ◄► buttons or the number pad.

The main menu and sub-menus can be exited step-by-step using the BACK button. Press the MENU button to return directly from one of the menus to the TV picture.

Main menu

(call up by pressing the MENU button)

Edit Channel List	Search Channels	Parental Control	Settings	Service Menu	Language Setting
	Automatic Channel Search		First installation (see the section "Connection and Set-Up", "First installation")	Software Update	
	Manual Channel Search		TV, Video and Audio	Load factory settings	
	Channel Search with service ID		Customize screen menu	USB Device Management	
			Date and time	Display device status	
			Common Interface		
			Antenna Configuration		

Main Menu - Edit Channel List

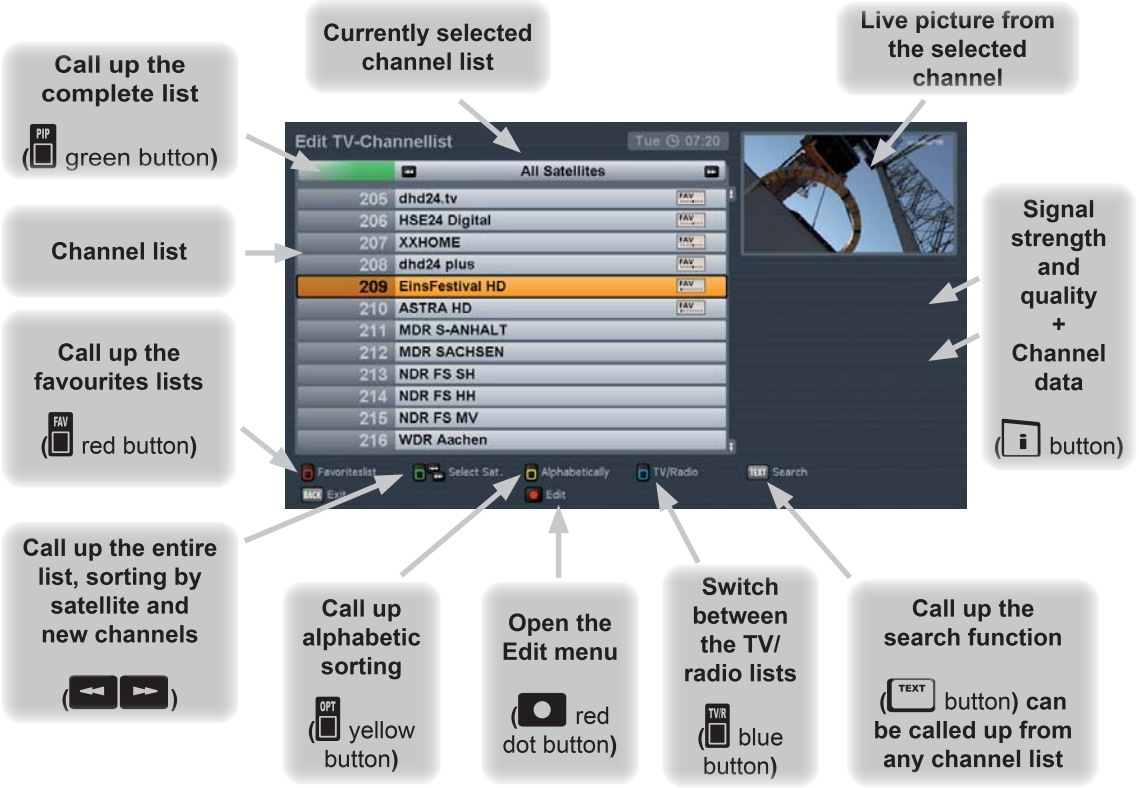
All changes to the channel lists and favourites lists which you can make as described in the following section are not saved by the receiver unless, when you exit the menu by pressing the BACK button, you answer "Yes, save changes" to the question "Save changes?", using the OK button. If you give the answer "No, do not save the changes", all the settings/changes you made will be discarded and not saved.

Calling up the "Edit Channel List" menu

Select the "Edit Channel List" menu using the MENU button, the ▲▼ buttons in the main menu and OK.

Selecting the channel list/favourites list to be edited

Now use the relevant coloured button to select the desired channel list category (see the "Basic operation" and "Channel selection from the channel list" sections for details). The following on-screen display appears (example):



Selecting the channels to be edited

Select a channel in the selected channel list/favourites list using the cursor ( ) buttons (see example screenshot on the right).

To select several channels that are listed directly following each other in the selected channel list, you can start block selection (see “Edit channels” “Start Blockselection”).

Move

After selection of the channel(s) to be edited, press the (red dot) button. The following display appears (see screenshot on the right). Use the buttons to select “Move” and confirm your selection with the OK button.

Now use the cursor ( ) buttons or the number pad to select the new channel memory position(s), then confirm the insertion with the OK button.

Delete

Channels that are deleted from a list other than a favourites list are deleted irrevocably and can only be restored by performing a new channel search.

Deletion of channels from a favourites list is the only circumstance in which the channels remain present in the complete list; the deletion only applies to the selected favourites list.

After selection of the channel(s) to be edited, press the ● (red dot) button.

Use the ▲ ▼ buttons to select “Delete” and confirm your selection with the OK button.
The selected channel(s) will be deleted.

Skip

After selection of the channel(s) to be edited, press the ● (red dot) button.

Use the ▲ ▼ buttons to select “Skip” and confirm your selection with the OK button.
The following on-screen display appears (see example screenshot on the right):
The channel that is to be skipped in future is shown in grey in the channel list. If you wish to select it in future, you can do this only by direct selection from the channel list. When manually zapping through the channels using the + - buttons, the channel will be skipped and no longer displayed.
This function can be cancelled using the edit menu (select: “Restore to zap list”).

Lock

After selection of the channel(s) to be edited, press the ● (red dot) button.

Use the ▲ ▼ buttons to select “Lock” and confirm your selection with the OK button.
To lock the channel you must now enter your four-digit PIN code (factory setting: 0000). The following on-screen display appears (see example screenshot on the right):
The locked channel is now displayed in the channel list with a padlock on the right hand side, and can in future be viewed only by entering the four-digit PIN code (factory setting: 0000).

This function can be cancelled using the edit menu (select: “Unlock”).

Add to favourites list

After selection of the channel(s) to be edited, press the ● (red dot) button.

Use the ▲ ▼ buttons to select “To Favorite: ***”. Now use the ◄ ► buttons to select the desired favourites list (see example screenshot on the right), into which the channel should be copied.

Confirm your selection with the OK button.

The highlighted channel is copied into your selected favourites list.

Start Blockselection

Press the ● (red dot) button.

Use the ▲▼ buttons to select "Start Blockselection" and confirm your selection with the OK button. You can now use the ▲▼ buttons to start block selection in the previously selected channel. This selects the channels in the sequence in which they appear in the previously selected channel list and applies a coloured background to them (see example screenshot on the right):

Then press the ● (red dot) button. You can now carry out all the editing functions channel by channel individually for all the selected channels. Select the desired action ("Move", "Delete", "Skip", "Lock" or "To Favorite"), using the ▲▼ buttons, and confirm your selection with the OK button. You can find an explanation of the individual edit options under "Edit Channel List (channel lists)" in this section.

Editing channels (favourites lists)

After selection of the channel(s) to be edited, press the ● (red dot) button. The following on-screen display appears (see screenshot on the right).

Remove from favoritelist

Use the ▲▼ buttons to select "Remove from favoritelist" and confirm your selection with the OK button.
The selected channel is deleted from the previously selected favourites list, but not from the complete list.

Lock

See “Edit channels (channel lists)”, “Lock”.

Rename favoritelist

A favourites list cannot be renamed unless it contains at least one channel assigned to it.

After selection of the channel(s) to be edited, press the ● (red dot) button.

Use the ▲ ▼ buttons to select “Rename favoritelist” and confirm your selection with the OK button.

You can now rename the favourites list you selected. The following on-screen display appears (see example screenshot on the right).

Alphanumeric characters are input as described in “Technical Appendix”, “Alphanumeric entries”.

Confirm the name you have entered for the favourites list using the OK button.

Start Blockselection

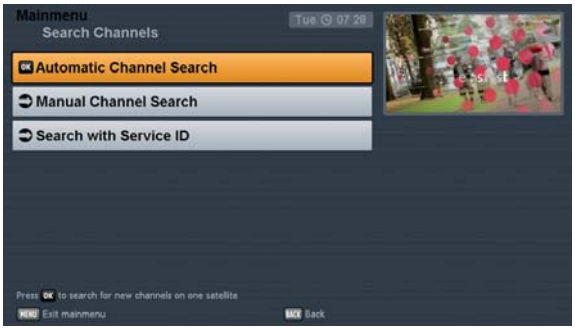
See “Edit channels (channel lists)”, “Start Blockselection”.

Main Menu - Search Channels

After calling up the menu you will see the following on-screen display:

You have three different search options:

- Automatic Channel Search
- Manual Channel Search
- Search with Service ID



Use the ▲▼ buttons to select the desired search type and confirm your selection using the OK button.

Automatic Channel Search	All transponders for the satellite you selected will be searched
Manual Channel Search	Only the selected transponder for the satellite you selected will be searched
Search with Service ID	Search for a specific channel using its service ID

Tip!

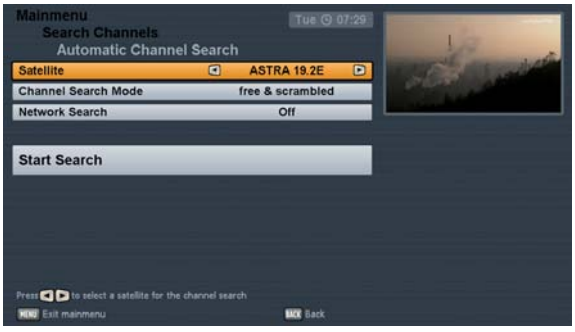
After a search (of whatever type) the receiver shows all newly found channels in the channel list under the heading “New Channels”.
You will find this rubric in the channel list at the end of the green complete list (select using the ◄◄ ►► buttons).

The channel list is called up on to the TV screen by pressing the OK button (see also section “Basic Functions”, “Channel selection from the channel list”).

Tip!

Automatic channel search

After calling up the menu you will see the following on-screen display:



The ▲▼ buttons allow you to select different sets of parameters for the search.

Satellite

Using the ◄► buttons, select the satellite to be searched. Make sure your reception system is aligned to the selected satellite. You can search only one satellite at a time. If you have connected a multi-feed reception system (e.g. reception of ASTRA 19.2° East and HOTBIRD 13° East),

you must repeat this procedure once for each satellite.

You can however start the first installation again, in the course of which a channel search of all the satellites you selected is performed.

Channel Search Mode

Use the ◄ ► buttons to select the type of channels that are to be searched for. You have three options:

- "free & scrambled" All channels are searched for
- "only free" Only free-to-air channels are searched for
- "only scrambled" Only encrypted channels are searched for

To view encrypted channels you need an appropriate CA (Conditional Access) module and a valid smart card together with a valid subscription to the relevant Pay TV provider.

Network Search

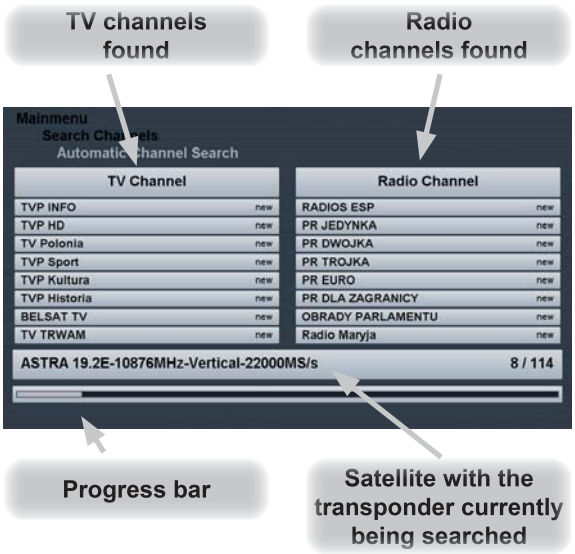
Use the ◄ ► buttons (On/Off) to select whether a network search should be performed. If you set the network search to "Off", only the factory stored transponders of the satellites you previously selected will be searched for new as yet unlisted channels. If you set the network search to "On", the transponder network enables additional transponders that have not yet been stored to be located. They are then stored and searched for new channels in the same way as the existing transponders.

Then use the ▲ ▼ buttons to switch to the field "Start Search". Pressing the OK button starts the search.

During the search you will see the following on-screen display (example):

The newly found channels are identified with the suffix "New" (see example screenshot on the right).

Note:
You can cancel the search at any time by pressing the BACK button.

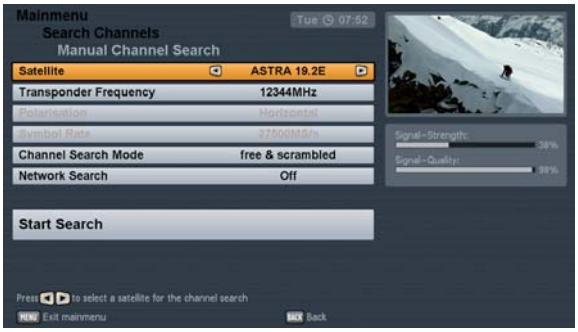


After completion of the search, you will see the following on-screen display (example):

Press the OK button.

Manual channel search

After calling up the menu you will see the following on-screen display:



The ▲▼ buttons allow you to select different sets of parameters for the search.

In this menu you can selectively search a transponder for the new channels.

Satellite

Use the ◄► buttons to select the satellite on which the transponder you want to search is located. Make sure your reception system is aligned to this satellite. If you want to search several transponders on a satellite, you should start an automatic search of the transmitting satellite.

Transponder Frequency

Use the ◄► buttons (transponder frequency already saved) or the number pad (transponder frequency not yet saved) to select the transponder frequency on which the channel being sought is transmitted. At the bottom right of the screen display, the receiver shows the current signal strength and signal quality of the selected transponder.

The "Polarisation" and "Symbol Rate" options only need to be specified if the transponder has yet to be saved.

Polarization

Press the ◄► buttons to select the correct polarisation (horizontal or vertical).

Symbol Rate

Use the number pad to enter the related symbol rate.

Channel Search Mode

Use the ◄ ► buttons to select the type of channels that are to be searched for. You have three options:

- "free and scrambled" All channels are searched for
- "only free" Only free-to-air channels are searched for
- "only scrambled" Only encrypted channels are searched for

To view encrypted channels you need an appropriate CA (Conditional Access) module and a valid smart card together with a valid subscription to the relevant Pay TV provider.

Network search

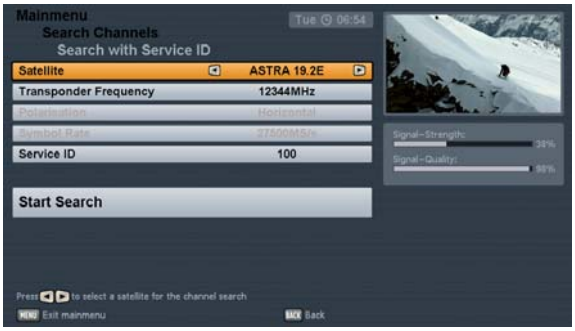
Use the ◄ ► buttons (On/Off) to select whether a network search should be performed. If you set the network search to "Off", only the factory stored transponders of the satellites you previously selected will be searched for new as yet unlisted channels. If you set the network search to "On", the transponder network enables additional transponders that have not yet been stored to be located. They are then stored and searched for new channels in the same way as the existing transponders.

Once you have performed all the settings, use the ▲ ▼ buttons to switch to the "Start Search" selection field and confirm the start of the search using the OK button.

The following displays during and in connection with the search are identical to those for the automatic search.

Channel Search with service ID

After calling up the menu you will see the following on-screen display:



The ▲ ▼ buttons allow you to select different sets of parameters for the search.

Satellite

Use the ◄ ► buttons to select the satellite that is transmitting the channels to be searched. Make sure your reception system is aligned to this satellite.

Transponder Frequency

Use the ◄ ► buttons (transponder frequency already saved) or the number pad (transponder frequency not yet saved) to select the transponder frequency on which the channel being sought is transmitted. At the bottom right of the screen display, the receiver shows the current signal strength and signal quality of the selected transponder.

The "Polarisation" and "Symbol Rate" options only need to be specified if the transponder has yet to be saved.

Polarization

Press the ◄ ► buttons to select the correct polarisation (horizontal or vertical).

Symbol Rate

Use the ◄ ► button or the number keys to enter the applicable symbol rate.

Service ID

Use the numeric pad to enter the service ID of the channel to be searched for.

Once you have performed all the settings, use the ▲ ▼ buttons to switch to the "Start Search" selection field and confirm the start of the search using the OK button.

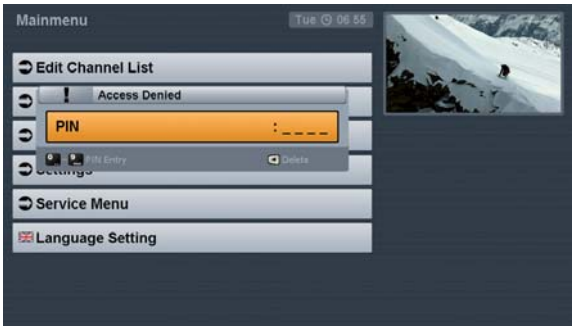
Note:

You can cancel the search at any time by pressing the BACK button.

The following displays during and in connection with the search are identical to those for the automatic search.

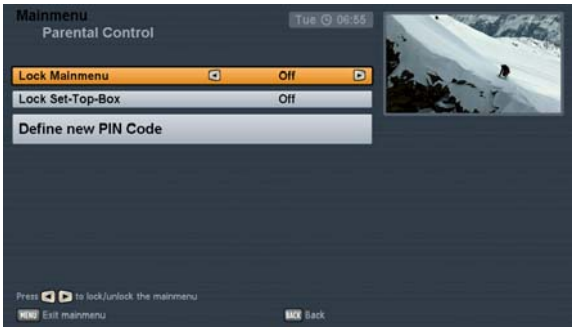
Main Menu - Parental Control

After calling up the menu you will see the following on-screen display:



In order to access this menu, you must enter the four-digit PIN code (factory setting: “0000”).

The following on-screen display then appears:



In this menu you can set various restrictions/parental controls.
The individual items are selected using the ▲ ▼ buttons.
The changes to the current settings can be performed using the ◄ ► buttons or the numeric pad.

Lock Mainmenu

Select here whether the main menu should be locked. If the main menu is locked, the four-digit PIN code will be requested when it is called up. Without the four-digit PIN code (factory setting: “0000”), the main menu cannot be viewed and no changes can be made to the device settings. Either

- On or
- Off

Lock Set-Top-Box

Select here whether the receiver should be locked. If the receiver is locked, the four-digit PIN code will be requested when it is switched on. Without the four-digit PIN code (factory setting: “0000”), the receiver cannot be operated. Either

- On or
- Off

Define new PIN Code

Confirm the selection with the OK button. Use the number pad to enter your new four-digit PIN code. When the fourth digit has been input, the receiver will automatically skip to the next line “Confirm PIN code”. For security you must now repeat the entry of the four-digit PIN code. To save the PIN code, now press the OK button.

Your device PIN code has now been changed.

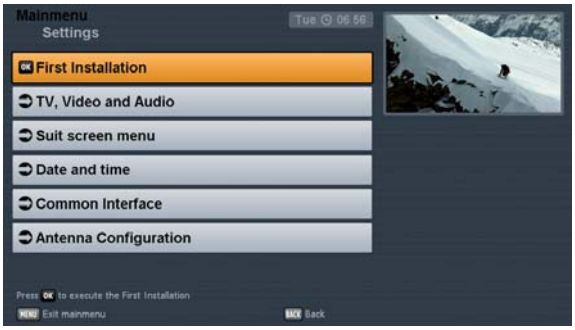
Keep your four-digit PIN code in a safe place, so that you always have access to your channels should you ever forget it.

If you have forgotten your device PIN code, you must contact your dealer, who will be able to unlock your receiver for you.

Main Menu - Settings

After calling up the menu you will see the following on-screen display:

Use the ▲▼ buttons to select the desired menu and confirm your selection using the OK button.



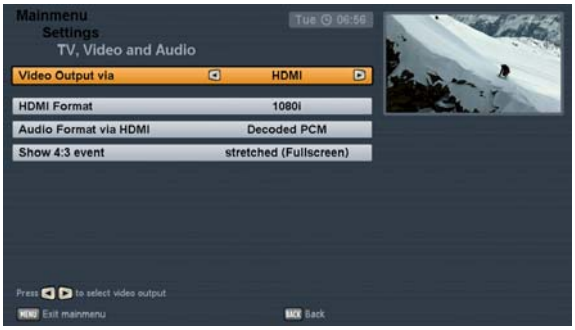
First installation

See the section “Connection and Set-Up”, “First installation”.

TV, video and audio

After calling up the menu you will see the following on-screen display:

The individual items are selected using the ▲▼ buttons. The changes to the current settings can be made using the ◄► buttons or the number pad.



Use the ✥ buttons here to select the settings for your TV set.

When doing this, refer to the operating instructions for your TV set!

Video output via
Select here the connection on the receiver to which you have connected your television.

Either:

HDMI or **SCART**

HDMI Format

Here you can select the video resolution that will be sent to your TV set. Either:

- 1080i (resolution 1920 x 1080, half-screen images)
- 576p (resolution 720 x 576, full-screen images) or
- 720p (resolution 1280 x 720, full-screen images)
- Automatic

Audio Format via HDMI

Here you can select the type of audio signal that is transmitted by the HDMI interface. Select the signal that your TV set can process:

- Decoded PCM or
- S/PDIF format

Show 4:3 event

Here you can select the type of screen display mode for 4:3 broadcasts on a 16:9 TV set:

- normal (Pillarbox)
- stretched (Full Screen) or
- zoom in (Pan & Scan)

TV aspect ratio

Here you can select the TV picture format. Either:

- 4:3 or
- 16:9

Picture format

Select the type of screen display, depending on your setting for the TV aspect ratio:

- TV aspect ratio “4:3”: Pan & Scan or Letterbox
- TV aspect ratio “16:9”: Always 16:9 or Automatic

TV Scart signal output

Select the type of video signal at the TV Scart socket here. Select the signal that your TV set can process:

- CVBS - Colour Video Baseband Signal or
- RGB - Red/Green/Blue signal

Television System

Here you select whether your TV set is a

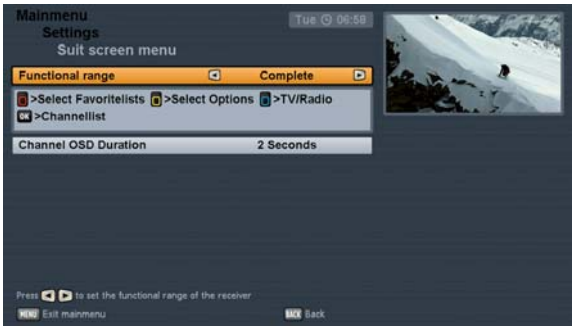
- PAL or
- NTSC

set. If you don’t know which it is, select the setting “AUTO” for automatic.

Suit screen menu

After calling up the menu you will see the following on-screen display:

The individual items are selected using the ▲▼ buttons. The changes to the current settings can be made using the ◄► buttons or the number pad.



Functional range
Here you can configure the functional scope of your receiver. You can choose between “High”, “Normal” and “Low”. The table below shows which functions are available at each configuration step.

	FAV button (red)	OPT button (yellow)	TV/R button (blue)	OK button
Complete	Select Favoritelists	Select options	TV/Radio	Channellist
Basic	Not assigned	Not assigned	Not assigned	Programme Guide
Middle	Select Favoritelists	Select options	TV/Radio	Programme Guide

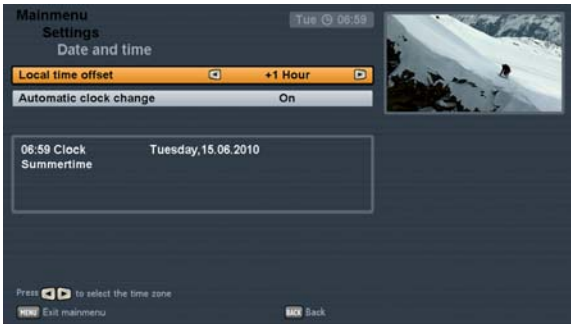
Channel OSD duration

Use the ◄► buttons to select the time after which you want the on-screen channel message display is automatically cancelled. The selections available are “Off”, 1, 2, 3, 4, 5 or 6 seconds.

Date and time

After calling up the menu you will see the following on-screen display:

The individual items are selected using the ▲▼ buttons. The changes to the current settings can be made using the ◄► buttons or the number pad.



Local time offset (GMT)

Here you can select the local time offset to UTC (formerly GMT) (e.g. for Germany: + 1 hour). You can set the offset in 1 hour steps. The maximum offset is 12 hours (+ and -).

Automatic clock change (Summer Time)

Here you can select whether the receiver should automatically change over to and from summer and winter time. Either

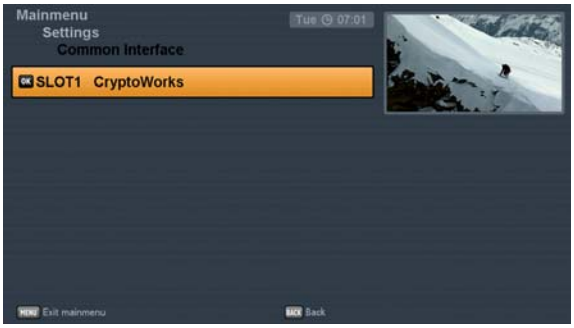
- On or
- Off

If you select “Off”, “Summertime” will be displayed in the line below. Here you manually set the time of the receiver to summer time (selection “Yes”). If “Summertime No” is selected, winter time is automatically selected.

Common Interface (CI)

After calling up the menu you will see the following on-screen display (example):

The individual items are selected using the ▲▼ buttons. The changes to the current settings can be made using the ◄► buttons or the number pad.



Press the OK button to access the menu generated by the CA module:

From this menu, your card and your PIN code allow you to access various channels from your Pay TV provider.
“CryptoWorks” has been selected as an example here. The details can be different for each CA module. Always follow the instructions supplied by your Pay TV provider!

Note: *The module on-screen displays may be shown in English, even if you have selected German as the menu language, because the menu is generated directly by the module!*

Tip!

Information for Conax, SECA, Viaccess and CryptoWorks users:

Note that with monthly activation intervals, the channel providers have different procedures for activating pay TV cards. Activation may therefore be a few days before or after the beginning of a new month. During this activation period, the CA module and card must be in the slot, and the receiver must be turned on and set to the booked Pay TV channel. Follow the instructions from the Pay TV provider.

If your Pay TV card is then still not enabled, we recommend you briefly withdraw the CA module with the card out of the slot, with the receiver switched on, and then re-insert it.

This information has nothing to do with the properties of the receiver; it is merely intended to assist you.

Tip!

Antenna Configuration

See the section “Connection and Set-Up”, “First installation”.

Main Menu - Service Menu

After calling up the menu you will see the following on-screen display:

Use the ▲▼ buttons to select the desired menu and confirm your selection using the OK button.

Under the “USB Device Management” selection, the following additional information is displayed:

- Operating software version currently in use on the receiver
- Hardware version of the receiver
- Date of the last update of the receiver operating software
- Date of the last update of the channel list

Software update

After calling up the menu you will see the following on-screen display:

Use the ▲▼ buttons to select the desired menu and confirm your selection using the OK button.

Software update via SAT

After calling up the menu you will first see the following display:

All available s modules/ components for your receiver will be loaded and then displayed.

The loading process can take up to 60 minutes

Use the ▲ ▼ buttons to select the parameters to be updated during the update procedure.

Show infotext:

Press the OK button to display the info text for the available downloads. These indicate the main features of the new operating software, based on which you can decide whether you want to install the new software on your receiver.

Update software:

Select “Yes” here if you want to install new software; select “No” if you are satisfied with your old software version and the changes in the new software are not relevant to you.

Updating the channel list:

Select “Yes” here if you want to install the new channel list, or “No” if you want to retain your old channel list.

If a new channel list is loaded, this will be automatically regenerated after each factory reset (Restore Factory Default settings) (see “Mainmenu”, “Service Menu”, “Factory Reset”).
Once you have made all the settings for updating your receiver, switch to the “Start Update” field and press the OK button. The receiver will now automatically start updating the components you selected.

Follow all on-screen instructions!

Once the update is complete, the receiver is re-initialised and starts operation again. Never turn off the receiver during the update process, as otherwise you could lose the entire software. You would then need to re-install it in a workshop or using a PC and network cable. You can use the Service menu to check whether the new software has been installed.

Check the time setting following a software update!

You can also download the updates from the Internet. The address is: www.kathrein.de. You will find the software under “Service” → “Software and Downloads” → “Receiver” → “UFS 900”

You can also perform this update via the receiver’s USB port (see “Service Menu”, “Software update”, “Software update over USB”).

Software update over USB

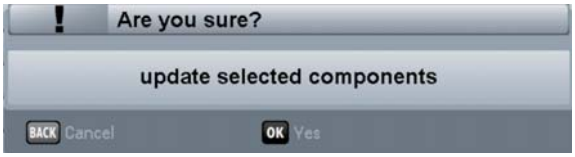
After calling up the menu you will see the following on-screen display (example):

A pre-condition for updating the software via the USB is that a FAT32 or EXT2 formatted USB storage medium with the software/channel list to be installed is connected to the USB port at the rear of the receiver.

You can also download the updates from the Internet. The address is: www.kathrein.de. You will find the software under "Service" → "Software and Downloads" → "Receiver" → "UFS 900"

Press the ▲ ▼ button and the OK button to select the software/channel list to be installed.

The following on-screen display appears:



Press the OK button to start the installation procedure.

The following on-screen display appears:

The receiver then starts the installation automatically

After the update of the channel list you must perform a factory reset (see "Mainmenu", "Service Menu", "Factory Reset"). Then to the second screen display during first installation "Select country list" set the answer in the "Restore Channellist" line to "Yes". In the "Presorted for" line, select the desired country for which you want the channels to be pre-sorted. The other settings should be performed as described under the "Connection and Set-Up" section of the "First installation".

Restore factory settings

After you have called up this menu you need to input the four-digit PIN code (factory setting: “0000”) to access it.

The following on-screen display then appears:

Now press the OK button to reset all the settings in the receiver to the as-delivered state, or abort the process by pressing the BACK button.

After the reset, the receiver automatically restarts and you will see the first on-screen display for the first installation. After a factory reset you must undertake the first installation (see section “Connection and Set-Up”, “First installation”).

USB Device Management

After calling up the menu you will see the following on-screen display (example):

This menu allows you to format a storage medium connected to the USB port and to create a “dedicated hard disk” (an archive hard disk specially reserved for this receiver).

This “dedicated hard disk” is necessary in order to make recordings using the receiver and also to view timeshift TV.

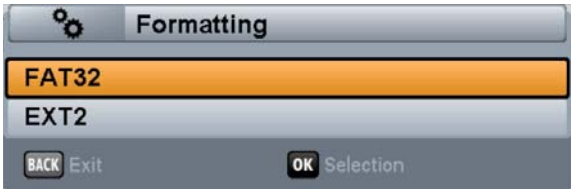
If the USB storage medium that is connected has more than one partition, you can use the ◄ ► buttons in the “Partition” line to select the desired partition.

Formatting (deleting)

Formatting (deleting) the selected/connected USB storage medium or the selected partition irrevocably deletes all data in it!

Press the ▲▼ buttons to select the "Formatting" field, then press the OK button.

The following on-screen display appears:



Press the ▲▼ buttons to select the "EXT2" setting, then press the OK button.

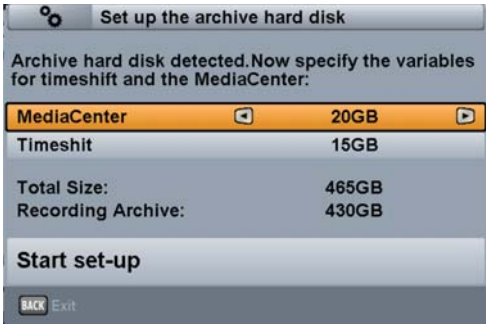
The receiver now starts the formatting. It can happen that during the formatting the TV picture freezes.
The receiver cannot then be used until formatting is complete.

Creating a dedicated hard disk (archive hard disk)

The setting up of a dedicated hard disk (an archive hard disk specially reserved for this receiver) is necessary in order to make recordings using the receiver and also to view timeshift TV.

Press the ▲▼ buttons to select the "Dedicated HDD" field, then press the OK button.

The following on-screen display appears:


Set up the archive hard disk
Archive hard disk detected.Now specify the variables for timeshift and the MediaCenter:
MediaCenter 20GB
Timeshit 15GB
Total Size: 465GB
Recording Archive: 430GB
Start set-up
BACK Exit

The individual items are selected using the ▲▼ buttons. Changes to the current settings can be made using the ◄► buttons.

MediaCenter

Here you can select how much storage space is available for storing multimedia data such as JPEG or MP3 files. For the hard disk in the example a maximum of 138 GB can be selected.

Timeshift

Here you can select how much storage space is available for the timeshift function. A maximum of 19 GB can be selected.

The more storage space is reserved for multimedia files and timeshift, the less the storage space available for the recording archive.

10 GB for the media centre and 8 GB for the timeshift function are sufficient in the "normal case".

Once you have performed all the settings, press the ▲▼ buttons to switch to the "Format archive hard disk" line and press the OK button to confirm.

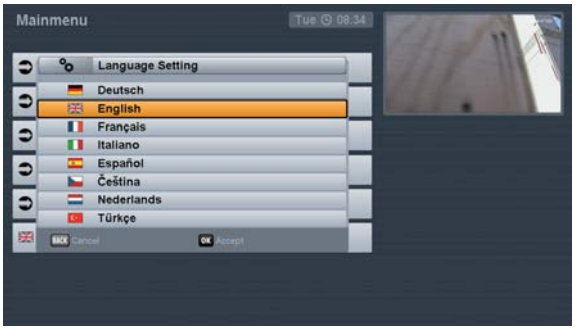
Answer the security question "All data on the USB data carrier will be deleted, do you want to continue" by now pressing the OK button. The hard disk setup now starts.

Depending on the capacity of the USB storage medium in question, this process can take several minutes.

As soon as the setup process is complete, the receiver automatically performs a reboot. You can now use the "Recording" and "Timeshift" functions.

Main Menu - Language

After calling up the menu you will see the following on-screen display:



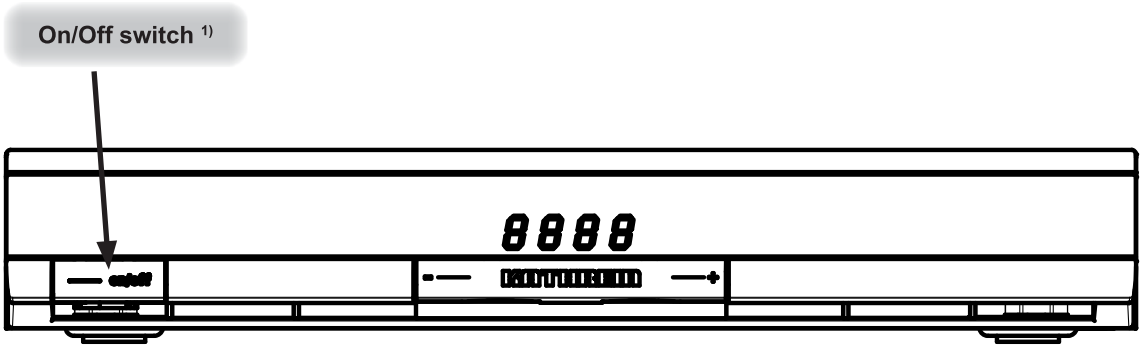
Use the ▲▼ buttons to select the desired menu language and confirm your selection using the OK button.

The following languages are available for selection: German, English, French, Italian, Spanish, Czech, Dutch and Turkish.

Operation without the remote control

If you have misplaced your remote control, or if the batteries are flat, you can still operate your receiver (to a limited extent) from the front panel.

Backup operation



There are four buttons on the front of the receiver:

On/Off switch [1]:
This switch allows you to switch the receiver on and off again.

Channel down -:
The channel down button switches to the next channel down in the currently selected channel list.

Channel up +:
This button allows you to start the receiver and also to switch to the next channel up in the currently selected channel list.

Because there are no numbered buttons, no password/PIN-protected functions can be displayed.

1) The unit is not fully disconnected from the mains (see the sections “Safety Instructions - Important Notes” and “Periods of extended absence, thunderstorms, mains socket accessibility”)

Troubleshooting

In the event of a malfunction, first check all the cable connections and operating states:
1. Receiver and TV set power plugs are connected to wall socket
2. Antenna cables are connected to the receiver input
3. Receiver and TV set are correctly connected to each other by a HDMI or Scart or cinch cable
4. Audio connections are made to the Hi-Fi or Dolby Digital system as appropriate
5. Receiver and TV set (Hi-Fi/Dolby Digital system) are switched on (check power indicators)
6. Receiver is responding to remote control

A selection of troubleshooting tips is offered below.

Problem	Cause	Remedy
A “No signal!” warning appears on some or all channels		Consult an antenna specialist to have it checked and repaired as necessary. Check the settings made in the “Settings”, “Antenna & Satellite”, “Tuner Configuration” menu, and change them if necessary.
Remote control no longer responding	Batteries may be discharged	Check the batteries
	Remote control code has been changed inadvertently	By simultaneously pressing the Back button in conjunction with buttons on the number pad (1-8) the remote control code can be changed. Your receiver requires the remote control code “1”. For this purpose simultaneously press the “Back” and “1” buttons.
Wrong time being displayed	“Summer Time” setting wrong. An incorrect time was imported from the reception signal	Check “Summer Time Enabled” in the “Settings” “Date and Time Setup” menu and change it as necessary Use the power switch to switch the receiver off from the current channel, e.g. Das Erste or ZDF, wait 10 seconds and then switch it back on
The following channels cut out or “No or bad signal!” appears: DSF, Tele 5, HSE 24 and Sonnenklar TV	DECT telephones operate on the same frequency as these channels. Interference may occur due to inadequate level or poor shielding of cable	Consult your antenna specialist

Alphanumeric entries

For entries such as names of favourites or search expressions, use the keyboard displayed on the screen (see example screenshot).

The letters assigned to the number pad also apply to your remote control. They are used very similarly to a mobile phone. The following buttons can be used for entry or to select an action:

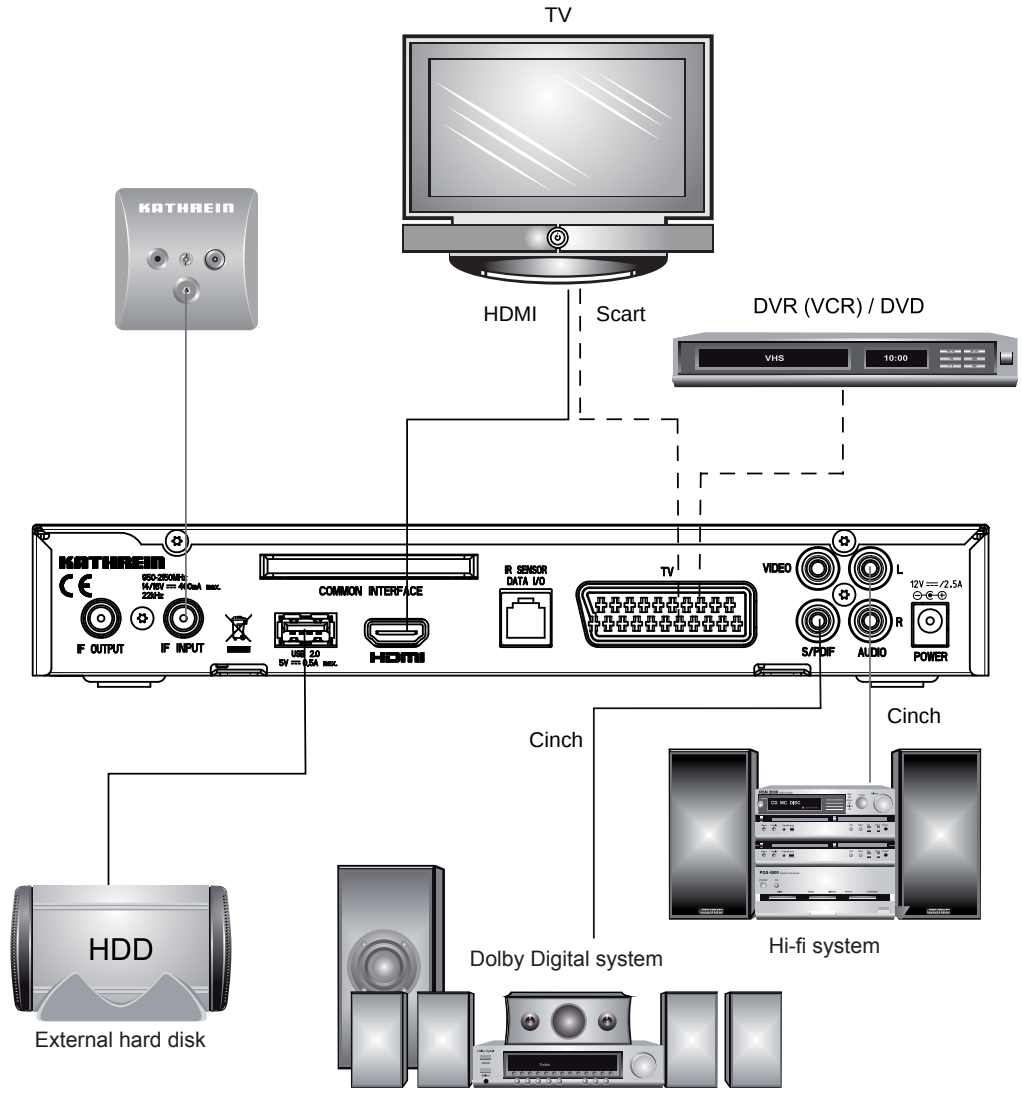
Button	Assigned character/action				
Press	1 x	2 x	3 x	4 x	5 x
1 .,:;@	.	ß	?	!	1
2 abc	a	b	c	2	ä
3 def	d	e	f	3	
4 ghi	g	h	i	4	
5 jkl	j	k	l	5	
6 mno	m	n	o	6	ö
7 pqrs	p	q	r	s	7
8 tuv	t	u	v	8	ü
9 wxyz	w	x	y	z	9
0 ␣	1 x space 2 x 0				
◄	Last character is deleted				
MENU	Switch between upper case and lower case letters				
OK	Confirm the term entered				

Technical appendix

BACK	Cancel entry without saving
TEXT	Cancel entry without saving

After you have entered the desired expression, press the OK button in order to load the name/search expression BACK or the TEXT button to abort the entry.

Advanced connection example

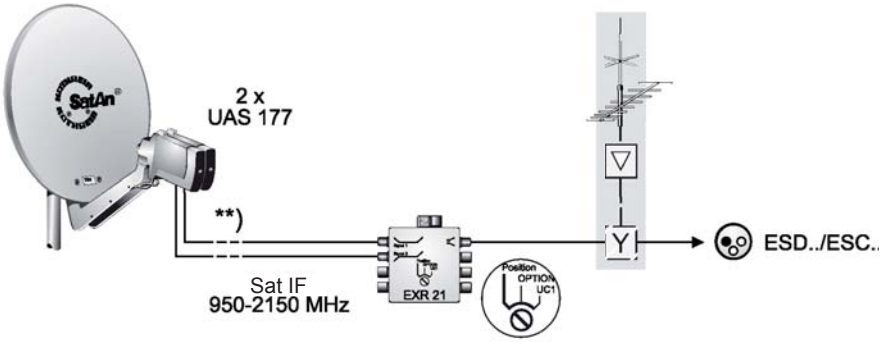


Technical Specifications

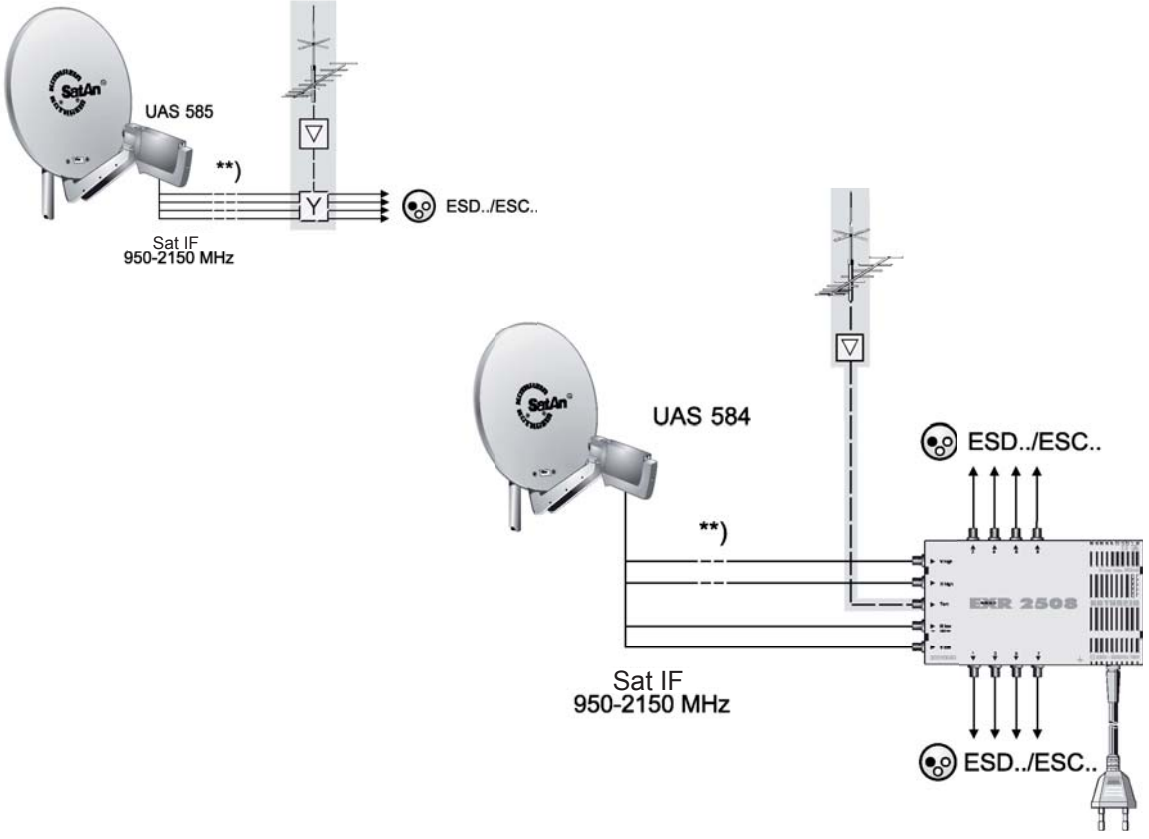
Type		UFS 900sw
Part no.		20210167
Colour		Black
RF range		
Sat IF band	MHz	950-2150
Input level band	dBµV	44-83
TV system, video		
Modulation, FEC, demultiplexer		DVB-S/DVB-S2 standard
Video resolution		CCIR 601 (720 x 576 lines), 576i, 576p, 720p, 1080i
Video decryption		MPEG-2-, MPEG-4-compatible
Input data rate	MSymb/s	2-45, (30 for DVB-S2/8PSK)
S/N	dB	> 53
TV system, audio		
Decryption		AC 3, MPEG 1, Layers 1, 2 and 3
Sampling rate	kHz	32/44.1/48
S/N	dB	> 65
Power Supply		
Power supply voltage	V/Hz	230 (+/- 10 %)/50-60
DC	V	12
Power consumption (max./typ. operation/ standby)	W	< 36/19/1
LNB supply (horiz./vert.)	V/mA	14/18; max. 400
Control signal	kHz	22; DiSEqC™1.0 and SCR single cable system
Connections		
Sat IF input/output		2 x F socket
TV/VCR connection		1 x Scart sockets
Video output (analogue)		1 x Cinch sockets
Video/audio output (digital)		1 x HDMI
Audio output (analogue)		2 x Cinch sockets
Audio output (digital)		1 x Cinch sockets
Data interface		RJ 11 socket
Common Interface		For 1 CA module
USB		1 x 2.0
Miscellaneous		
Ambient temperature	°C	Max. +5 to +40
Unit dimensions (W x H x D)	mm	255 x 47 x 190
Weight	kg	< 2

Sat IF connection examples

Single systems

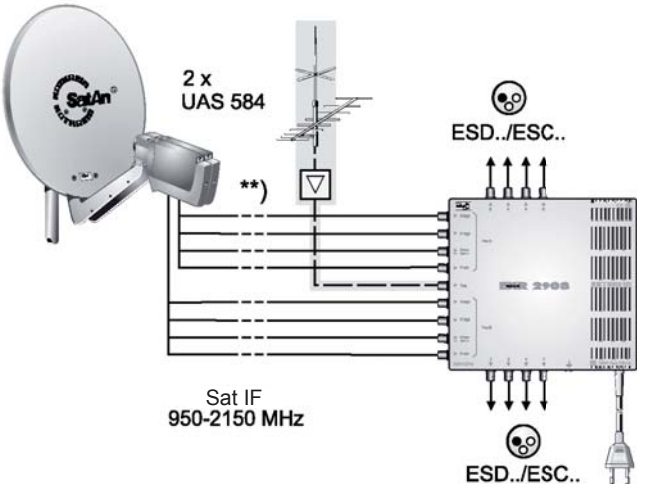


Community antenna network systems (4 x Sat IF)

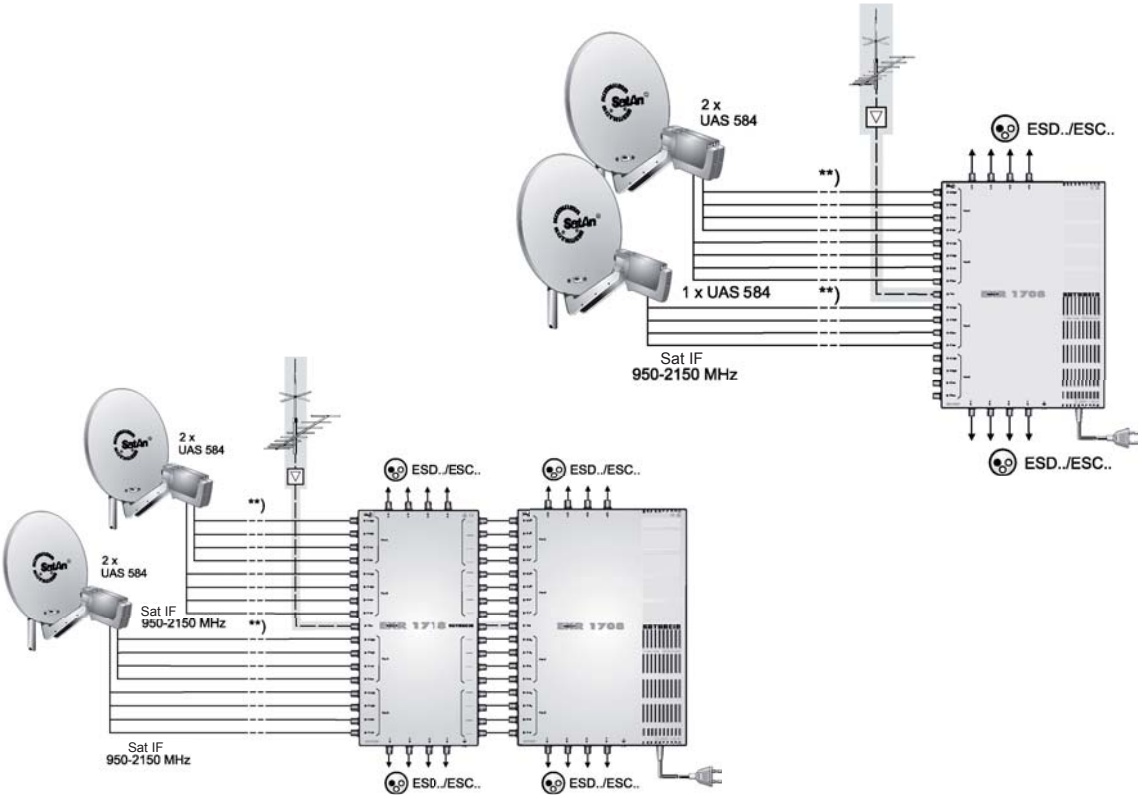


**) KAZ 11/KAZ 12 overvoltage protector

Community antenna network systems (8 x Sat IF), multi-feed

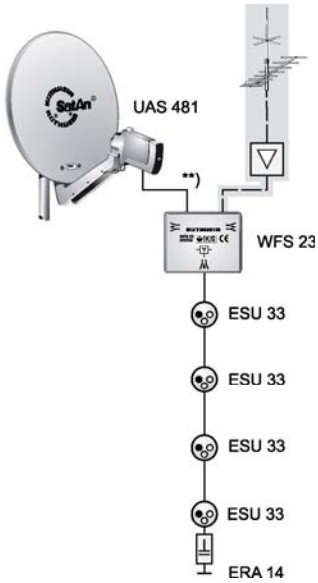


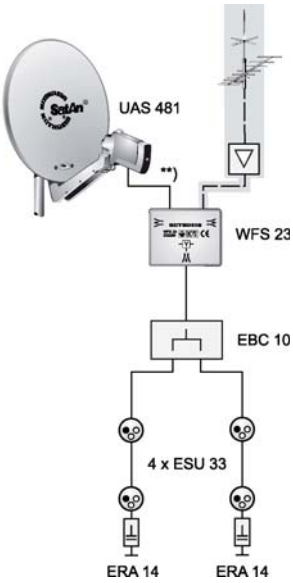
Community antenna network systems (16 x Sat IF), multi-feed

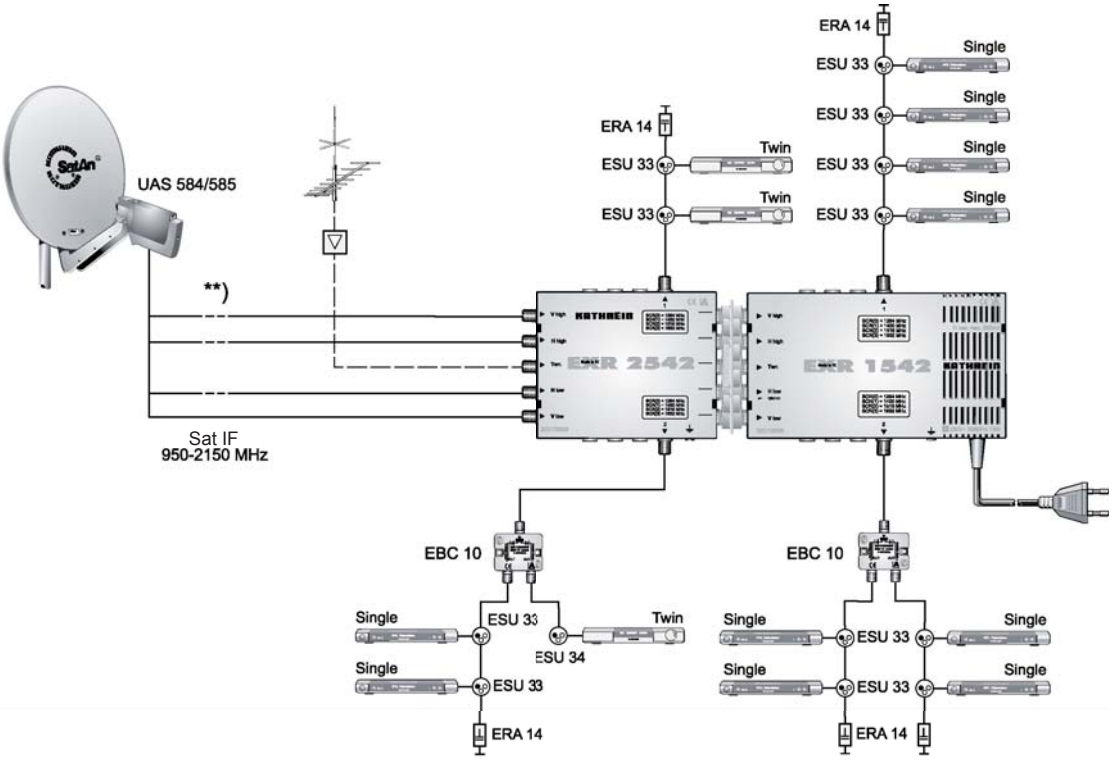


**) KAZ 11/KAZ 12 overvoltage protector

Single cable systems

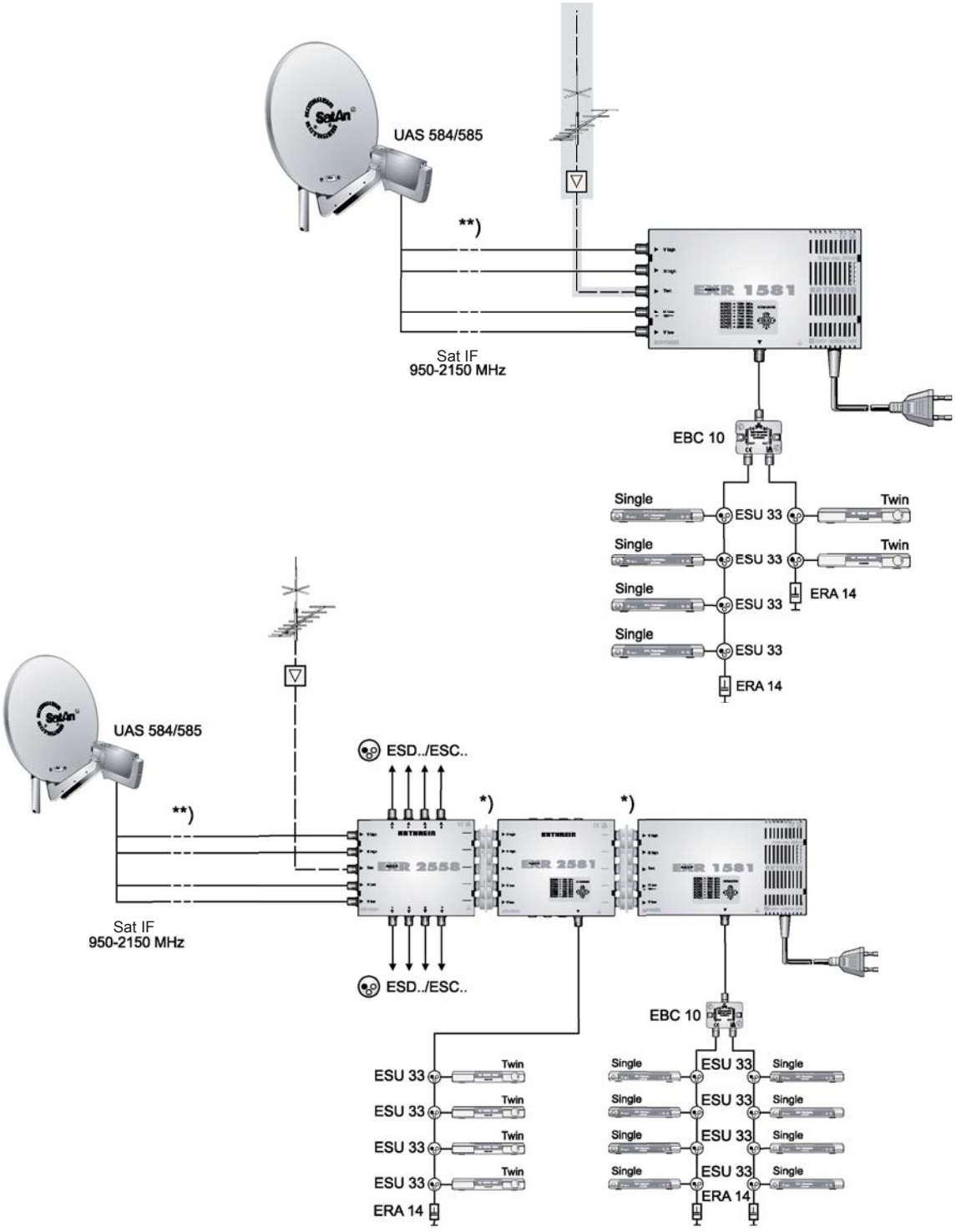






4 connections per living unit

**) KAZ 11/KAZ 12 overvoltage protector



**) KAZ 11/KAZ 12 overvoltage protector

AC 3
Output for Dolby Digital signal

ASTRA
SES (Société Européene des Satellites) satellite system. Analogue and digital transponders in the frequency range 10.7-12.75 GHz.

AV programme pos.
Preferred programme slot on TV set for external connections such as Scart and HDMI

CAM – Conditional Access Module
Decryption decoder, which uses a smart card to decrypt the encrypted radio and TV signals.

Channel package
The channel package for a digital transponder normally includes several TV and radio channels. Each channel package has a fixed assignment for the transponder transmission frequency, for polarisation (horizontal or vertical), for the symbol rate and for the Viterbi rate or error rate.

CI - Common Interface
Internationally standardised interface for CA modules

Composite colour video signal
Colour baseband signal for the transmission of colour video signals

Data rate
Data bits transmitted per second. Is expressed in kbit/s or Mbit/s. The higher the data rate the better the quality of the transmitted signal.

Data reduction
Compression of video and audio signals. Redundant information is discarded.

DiSEqC™
DiSEqC™ (Digital Satellite Equipment Control) is a communication system between a satellite receiver (master) and the peripheral satellite components (slaves), such as LNBs, multi-switches, rotating antenna systems.
It is a single master/multi-slave system, i.e. there is only ever one master in the satellite system. All activities start from the master.

DiSEqC™ components
If DiSEqC™ switching matrices are cascaded, the master receiver must transmit the DiSEqC™ signal several times, so that all DiSEqC™ multi-switches in the cascade receive their commands.
These days, DiSEqC™ components (slaves) must be downward compatible, i.e. respond to the analogue switching criteria from receivers that are only equipped with H/V and 22 kHz control signals.
A DiSEqC™ switching matrix will work with analogue switching criteria until the DiSEqC™ command from the master is received. All analogue switching criteria are then ignored.

Dolby Digital 5.1
Dolby Digital is a sound transmission that allows digital surround sound to be output on a home cinema system.

DVB - Digital Video Broadcasting
DVB-S refers to the transmission method (S = satellite, C = cable, T = terrestrial).

DVB-S2
An enhanced DVB-S signal for HDTV with better quality.

EUTELSAT
European Satellite operator, based in Paris. Many orbit positions and European customers. Transponders in the frequency range 10.7-12.75 GHz.

FAT and FAT32
File systems for storage media

FEC
FEC is the abbreviation for Forward Error Correction. A technique for reducing the error rate of data transmission. Additional bits are inserted into the data stream, so that error-correction algorithms can be used on reception. The FEC error rate corresponds to the Viterbi rate.

GNU
GNU is not Unix, it is an open operating system for software developers.

HD – Ready
This is a label created by the EICTA (European Information, Communications and Consumer Electronics Industry Technology Association) for equipment that is capable of reproducing HDTV.

HDCP – High-bandwidth Digital Content Protection
Encryption system which protects the HDMI and DVI interfaces for secure transmission of video and audio data.

HDMI – High Definition Multimedia Interface
Digital interface for digital video and audio data transmission between TV and receiver (preferred for HDTV).

HDTV – High Definition Television
High resolution television with a resolution up to 5 times higher or finer than PAL or NTSC.

High band
Satellite frequency range between 11.7 GHz and 12.75 GHz.

H.264
Another designation for MPEG-4.

JPEG - Joint Photographic Experts Group
Image compression technique.

Linux
Operating system

LNB - Low Noise Block Converter
Converts the satellite downlink frequencies into the Sat-IF.

Low band
Satellite frequency range between 10.7 GHz and 11.7 GHz.

MP3
File format for compressed audio files

MPEG-2
MPEG is the abbreviation for “Moving Picture Experts Group”, a working group that formulates internationally applicable standards for the digital compression of video and audio. MPEG-2 has become established as the standard for compression of digital TV signals. MPEG-2 works up to a data rate of 100 Mbit/s.

MPEG-4
A further development of MPEG-2 with even higher data compression, intended for HDTV transmissions.

NIT
The channel identification number is also referred to as the Network ID or NIT.

NTFS
File system for storage media

OSD – On-Screen Display
Displays by the receiver on the TV screen (e.g. main menu)

PAL
Analogue TV standard

Pay TV
Television channels available on subscription (e.g. Sky). Encrypted transmitters which can be decrypted only by using the appropriate smart card. As a rule these services are subscription-only.

PID
The PID (Packet IDentification) number is an identification number for video signals and audio signals in the digital data stream of DVB-MPEG-2 signals. The receiver uses the PID number to create a unique assignment for the video and audio data transmission. The PCR-PID is the identification number for the synchronization signal. The PID-PCR is normally identical to the video PID. For programmes broadcast in multiple languages, the audio PD can be entered manually to assign a different language to the TV programme. After the PID is entered, the digital receiver automatically selects the audio data identified by the PID number from the data stream and assigns it to the video signal.

PIN
Personal Identification Number. For this unit the PIN is a 4-digit numeric code which must be entered to unlock the unit to allow access to certain functions and channels.

Polarization
The individual transponders on satellites transmit on two different (polarisation) planes (horizontal and vertical). As a result the capacity of the transponder is increased.

QPSK - Quadrature Phase Shift Keying
Digital modulation process that is used for satellite transmission (8PSK is also used in connection with HDTV).

Receivers
Receiver

RGB
Video signal made up of three individual colour signals (red, green, blue)

SAT IF signal
Receiver input signal, satellite intermediate frequency

Scart cable
21-pin connecting cable (e.g. receiver/TV)

SCR single cable system - Satellite Channel Router
The single-cable system is used to distribute digital Sat IF signals (including HDTV) and terrestrial signals over one cable to up to eight receivers. There is no limit on the variety of channels, i.e. the complete range of channels from one or two satellites is transmitted. Switching and the transponder selection are undertaken in the feed system or in the matrix and are controlled by the receiver using a special DiSEqC™ command to EN 50494. Each receiver is allocated a fixed subscriber frequency over which it receives its channels. A twin receiver requires two such subscriber frequencies. The transponder selection and conversion to the subscriber frequencies is undertaken using special tuner modules, so-called SCR (Satellite Channel Router) that are installed in the feed system or in the matrix.
The Kathrein single-cable system satisfies the single-cable standard in accordance with EN 50494, i.e. all components of a single-cable system that satisfy this standard can be installed in a satellite system

Smart card
Card from Pay TV provider to decrypt its channels

Stand-by
Standby mode

Symbol Rate
The symbol rate describes the quantity of data that is transmitted per second. The symbol rate is measured in MSymbols/s and is equal to the number of symbols received per second.

Timeshift function
Time shifted playback

Transponder
A transponder is a frequency converter which receives TV and radio signals broadcast from the earth, converts them and the rebroadcasts them to the earth at a different frequency. A satellite has several transponders.
Analogue transponders transmit only one TV channel and possibly multiple radio channels on a single transmission frequency.
Digital transponders simultaneously transmit several TV and several radio programmes on a transmission frequency. If a channel provider is broadcasting several TV channels via a digital transponder, we refer to the provider's channel package. The terms “digital transponder” and “channel package” have the same meaning.

VCR/PVR connection
Connection for an external recorder (such as a video or DVD recorder)

Viterbi rate
The Viterbi rate (code rate, error rate) characterises the error protection used by the channel provider. The DVB standard provides the following values: 1/2 - 2/3 - 3/4 - 5/6 - 7/8

Y/C
S-video signal

8PSK (8-Phase-Shift-Keying)
Digital modulation process used for HDTV satellite transmission

Service

If, despite studying this operating manual, you still have questions about getting started with the unit or using it correctly, or if unexpected problems occur, please contact your specialist dealer.

For your notes

For your notes

For your notes

936.3847/-/0610/ZWT - Technical data subject to change.

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